



## Appendix E.1

# BIOLOGICAL TECHNICAL REPORT



## California Crossings

Biological Technical Report  
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# California Crossings Biological Technical Report

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## **GLOSSARY OF TERMS AND ACRONYMS**

BGEPA	Bald and Golden Eagle Protection Act
BMO	Biological Mitigation Ordinance
BRCA	Biological Resource Core Area
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
Corps	U.S. Army Corps of Engineers
County	County of San Diego
EDAW	EDAW, Inc.
EOMSP	East Otay Mesa Specific Plan
ESA	Endangered Species Act
FEIR	Final Environmental Impact Report
HCP	Habitat Conservation Plan
HELIX	HELIX Environmental Planning, Inc.
MBTA	Migratory Bird Treaty Act
MSCP	Multiple Species Conservation Program
NCCP	Natural Communities Conservation Planning
NE	Narrow Endemic
NPPA	Native Plant Protection Act
RMP	Resource Management Plan
RPO	Resource Protection Ordinance
SAMP	Special Area Management Plan
SR	State Route
USFWS	U.S. Fish and Wildlife Service

## SUMMARY (ABSTRACT)

This biological technical report was prepared to evaluate the proposed California Crossings project within an approximately 34.0-acre study area. The study area consists primarily of vacant land located in Otay Mesa in an unincorporated portion of San Diego County.

The project applicant proposes a regional retail commercial center anchored by a Target store.

Four (4) vegetation communities were mapped within the study area: non-native grassland, non-native vegetation, disturbed habitat, and developed land. No U.S. Army Corps of Engineers or California Department of Fish and Game jurisdictional areas, or County of San Diego Resource Protection Ordinance wetlands occur within the study area.

No sensitive plant species were observed within the project study area. Eight (8) sensitive animal species were observed/detected within the study area: grasshopper sparrow (*Ammodramus savannarum*), turkey vulture (*Cathartes aura*), northern harrier (*Circus cyaneus*), white-tailed kite (*Elanus leucurus*), California horned lark (*Eremophila alpestris actia*), prairie falcon (*Falco mexicanus*), loggerhead shrike (*Lanius ludovicianus*), and common barn owl (*Tyto alba*).

Implementation of the proposed project would result in direct impacts to 22.2 acres of non-native grassland, 0.4 acre of non-native vegetation, 9.2 acres of disturbed habitat, and 2.2 acre of developed land.

Implementation of the proposed project would result in impacts to the 8 sensitive animal species observed/detected within the study area as a result of loss of habitat. In addition, indirect impacts to animals may occur as a result of noise.

Impacts to non-native grassland would be mitigated at a greater than 0.5:1 ratio with acquisition of the 15.4-acre Attisha Trust parcel consisting of 0.15 acre of vernal pool habitat, 10.8 acres of Diegan coastal sage scrub (including disturbed), 1.8 acres of non-native grassland, 0.8 acre of disturbed habitat, and 1.9 acres of developed land in the City of San Diego. A conservation easement shall be placed over the Attisha Trust parcel and a one-time endowment shall be provided by the project applicant to be used for perpetual management of the Attisha Trust parcel. In addition, although no impacts to burrowing owl (*Athene cunicularia*) are anticipated, the project applicant proposes installation of 5 artificial burrowing owl burrows on the Attisha Trust parcel to improve the habitat value for this species. The County of San Diego Department of Parks and Recreation has agreed to accept the Attisha Trust parcel in fee title along with the endowment to manage the parcel in perpetuity following installation of fencing and burrows (per. comm. Boaz 2008). Mitigation for impacts to sensitive animal species also would be mitigated with acquisition of the Attisha Trust parcel. If clearing or grading were planned to begin during the breeding season, a pre-construction survey shall be conducted to determine if breeding or nesting avian species occur within impact areas. These mitigation measures would reduce project impacts to below a level of significance.

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# **1.0 INTRODUCTION**

## **1.1 PURPOSE OF THE REPORT**

This biological resources report was prepared by HELIX Environmental Planning, Inc. (HELIX) for the proposed California Crossings project (proposed project) to provide the project applicant, County of San Diego (County), resource agencies, and public with current biological data to satisfy review of the proposed project under the California Environmental Quality Act (CEQA) and demonstrate compliance with federal, state, and County regulations. This report describes the site's current biological conditions, vegetation communities, plant and wildlife species observed or detected during the surveys, and identifies those resources that are sensitive. It also identifies sensitive species with potential to occur on site. In addition, project impacts are assessed, and mitigation is proposed to offset the proposed project's unavoidable significant impacts to sensitive biological resources.

## **1.2 PROJECT LOCATION AND DESCRIPTION**

### **1.2.1 Project Location**

The proposed 34.0-acre study area (consisting of Assessor's Parcel Number 646-240-48 and the off-site project footprint area) is located in Otay Mesa in an unincorporated portion of San Diego County approximately 1 mile east of Brown Field (Figure 1). The study area is located immediately east of State Route (SR) 125, west of Harvest Road, and north of Otay Mesa Road within unsectioned land of Range 1 West, Township 18 South of the U.S. Geological Service 7.5-minute Otay Mesa quadrangle map (Figure 2). The study area lies within the boundaries of the South County Segment of the County's Multiple Species Conservation Program (MSCP) Subarea Plan within the East Otay Mesa Specific Plan Area. The study area is primarily undeveloped and is designated as a Minor Amendment Area in the County MSCP Subarea Plan.

### **1.2.2 Project Description**

The project applicant proposes a regional retail commercial center anchored by a Target store. Off-site grading to accommodate the proposed project would occur within the SR-125 right-of-way to the west and within the adjacent property to the north.

## **1.3 SURVEY METHODS**

Prior to performing fieldwork within the study area, a review of existing information (including previous reports and soils surveys) and a search of the California Department of Fish and Game (CDFG) California Natural Diversity Database (CNDDDB; CDFG 2008a and 2008b) were performed. These data provided surveyors with background information and previously reported conditions for the study area and project vicinity. Literature reviewed included biological technical reports for the East Otay Mesa Specific Plan (EOMSP; EDAW 2001a and b) and field work conducted by Merkel and Associates within the study area in 2006 and 2007.

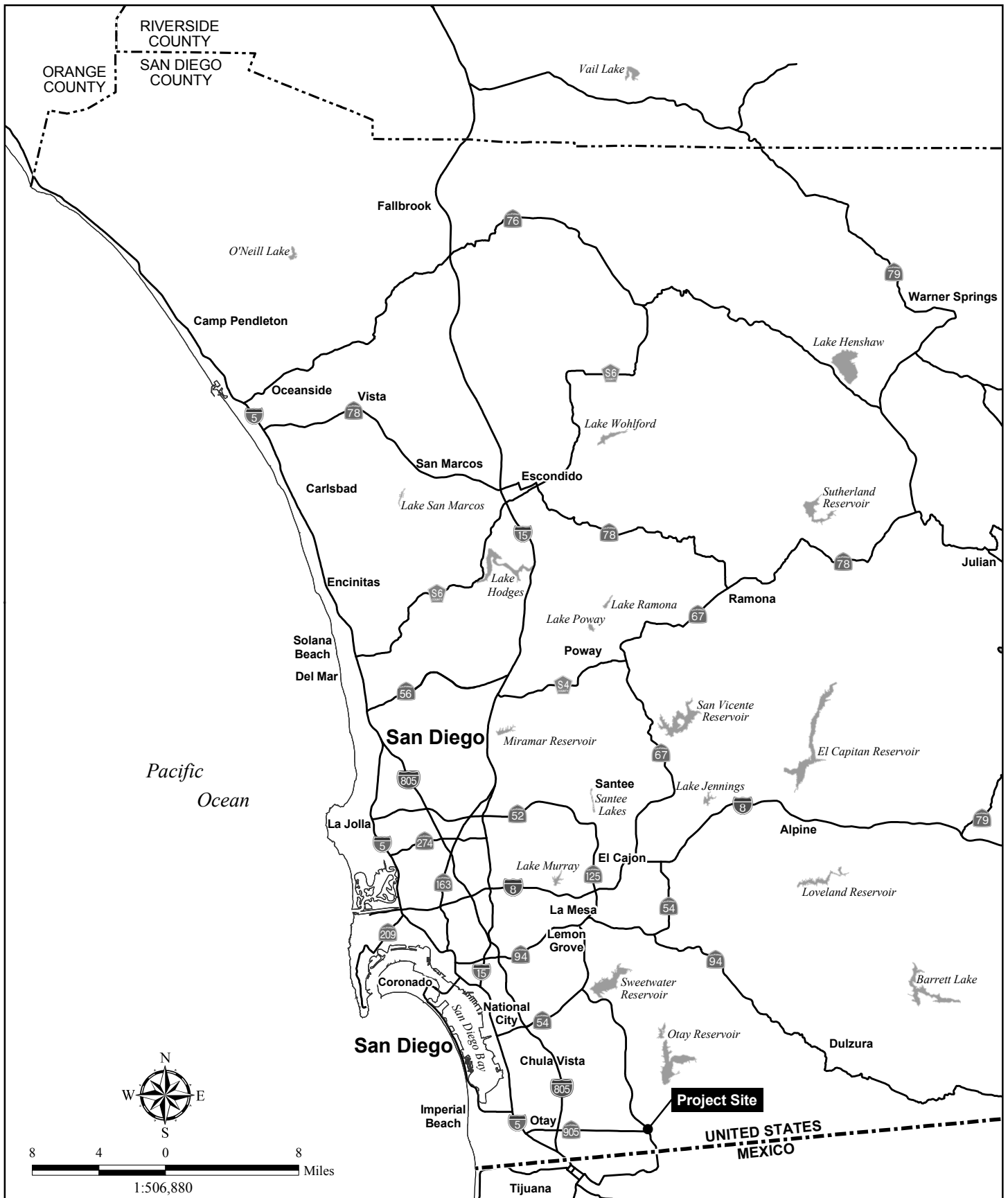
Nomenclature used in this report follows Holland (1986) and Oberbauer (2008) for vegetation community categories; Hickman, ed. (1993) or Rebman and Simpson (2006) for plants; Emmel and Emmel (1973), Glassberg (2001), Pyle (1995), and Opler (1990) for butterflies; Crother (2001) for amphibians and reptiles; American Ornithologists' Union (2008) for birds; and Baker et al. (2003) for mammals. Plant species status is taken from the California Native Plant Society (CNPS; 2008) and animal species status is from the CDFG (2008b).

### **1.3.1 General Biological Survey and Vegetation Mapping**

In 2006, Merkel and Associates completed vegetation mapping and general plant and animal surveys within the majority of the study area. Vegetation was mapped on a 1"=100' color aerial photograph.

In 2008, HELIX biologist Brian Parker verified and updated vegetation mapping within the study area (Table 1). The study area was walked, and all biological resources were recorded and mapped according to the County's Biological Resource Mapping Requirements (County 2007). Vegetation communities within the study area and 100 feet off site were mapped on an aerial photograph (1"= 300' scale) of the study area. Lists of all plant and animal species detected during field visits were prepared. Special attention was paid to areas that could support burrowing owl (*Athene cunicularia*). Plant identifications were made in the field through comparison with photographs or voucher specimens. All animal identifications were made by direct visual observation or indirectly by detection of calls or scat.

<b>Table 1 SURVEY INFORMATION</b>		
<b>DATE*</b>	<b>SURVEY PERSONNEL</b>	<b>SURVEY TYPE</b>
April 29, 2006	Melissa Booker*	Vegetation mapping, general biological surveys, Quino checkerspot butterfly habitat assessment, and Quino checkerspot butterfly survey
May 5, 2006	Melissa Booker*	Quino checkerspot butterfly survey
May 10, 2006	Kyle Ince*	Rare plant survey and Quino checkerspot butterfly survey
May 15, 2006	Melissa Booker*	Quino checkerspot butterfly survey
May 23, 2006	Melissa Booker*	
May 26, 2006	Kyle Ince*	Rare plant survey
May 30, 2006	Melissa Booker*	Quino checkerspot butterfly survey
June 6, 2006	Melissa Booker*	
July 26, 2007	Kyle Ince*	Rare plant survey
March 14, 2008	Brian Parker, Stacy Nigro	Quino checkerspot butterfly

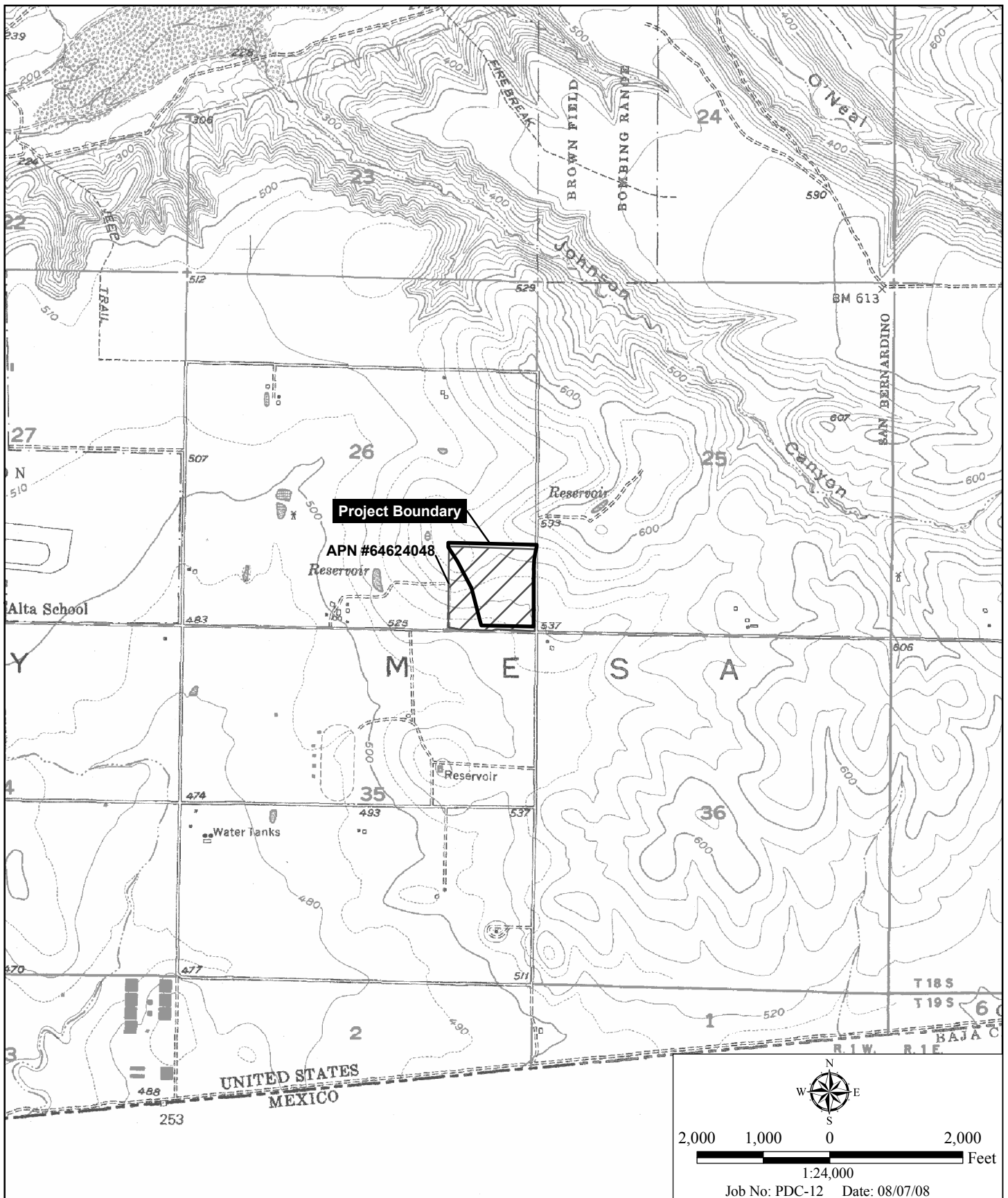


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## Regional Location Map

CALIFORNIA CROSSINGS

Figure 1



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## Project Vicinity

CALIFORNIA CROSSINGS

Figure 2

HELIX

**Table 1 (cont.)  
SURVEY INFORMATION**

<b>DATE*</b>	<b>SURVEY PERSONNEL</b>	<b>SURVEY TYPE</b>
March 22, 2008	Brian Parker	
March 24, 2008	Dale Ritenour	
April 2, 2008	Amy Mattson, Brian Parker, Stacy Nigro, Rob Hogenauer	
April 8, 2008	Dale Ritenour	
April 9, 2008	Brian Parker	Verify and update vegetation mapping
May 5, 2008	Dale Ritenour	
June 16, 2008	Dale Ritenour	Rare plant survey
July 7, 2008	Amy Mattson	
July 11, 2008	Amy Mattson	
July 14, 2008	Amy Mattson	Burrowing owl survey
July 15, 2008	Amy Mattson	

\*Denotes Merkel and Associates biologists

### **1.3.2 Rare Plant Survey**

In 2006 and 2007, Merkel and Associates conducted 3 rare plant surveys, which were conducted by walking transects in areas with suitable soils and/or vegetation.

In 2008, HELIX conducted 2 rare plant surveys during the flowering period of sensitive plants with potential to occur on site. Surveys were conducted by walking transects.

### **1.3.3 Quino Checkerspot Butterfly Survey**

In 2006, Merkel and Associates conducted protocol surveys for the Quino checkerspot butterfly (*Euphydryas editha quino*) to determine presence/absence of the species. Surveys followed U.S. Fish and Wildlife Service (USFWS) Year 2002 Survey Protocol. The habitat assessment occurred in April and the study area was surveyed April through June (Merkel and Associates 2006).

In 2008, HELIX conducted surveys pursuant to USFWS Year 2002 Survey Protocol to determine presence of Quino checkerspot butterfly within the study area. A total of 5 focused Quino checkerspot butterfly presence/absence surveys were conducted by permitted HELIX biologists (Permit TE778195; Table 1). Per USFWS protocol, appropriate habitat was surveyed on foot at a rate of between 10 and 15 acres per surveyor per hour, and all butterflies observed were identified. Potential Quino checkerspot butterfly host or nectar plants were also identified and recorded. In addition, during each visit, HELIX biologists surveyed opportunistically for burrowing owls within the study area.

### **1.3.4 Burrowing Owl Survey**

In 2006 (date unknown), Merkel and Associates conducted a habitat assessment and burrow survey for the burrowing owl using methods recommended in the *Burrowing Owl Survey Protocol and Mitigation Guidelines* (California Burrowing Owl Consortium [CBOC]1993). The presence of burrowing owl habitat was assessed on site and within a 500-foot buffer surrounding the project boundary. Grasslands with less than 30 percent ground cover were deemed suitable habitat. Suitable areas were walked in 30-foot wide transects for the presence of natural or artificial burrows (e.g., culverts, debris piles, storm drains).

In 2008 (date unknown), Merkel and Associates conducted a winter burrowing owl survey.

In 2008, HELIX conducted 1 nesting season survey on site and within 150 meters off site (HELIX 2008). The survey consisted of 4 site visits and was conducted in accordance with the California Burrowing Owl Consortium Survey Protocol (CBOC 1993) for all areas on site. A portion of the required 150-meter off-site buffer survey area surrounding the project area was not accessible. The SR 125 easement to the west, the SR 905 easement, and the industrial facilities to the southeast and adjacent lands to the east clearly marked as “No Trespassing” were not surveyed, except as visible from adjacent areas. During the initial site visit, a habitat suitability assessment was conducted. This included observations of vegetation types, burrows, and burrowing animals. During all 4 site visits, the survey area was examined on foot by walking transects with the aid of binoculars.

## **1.4 ENVIRONMENTAL SETTING**

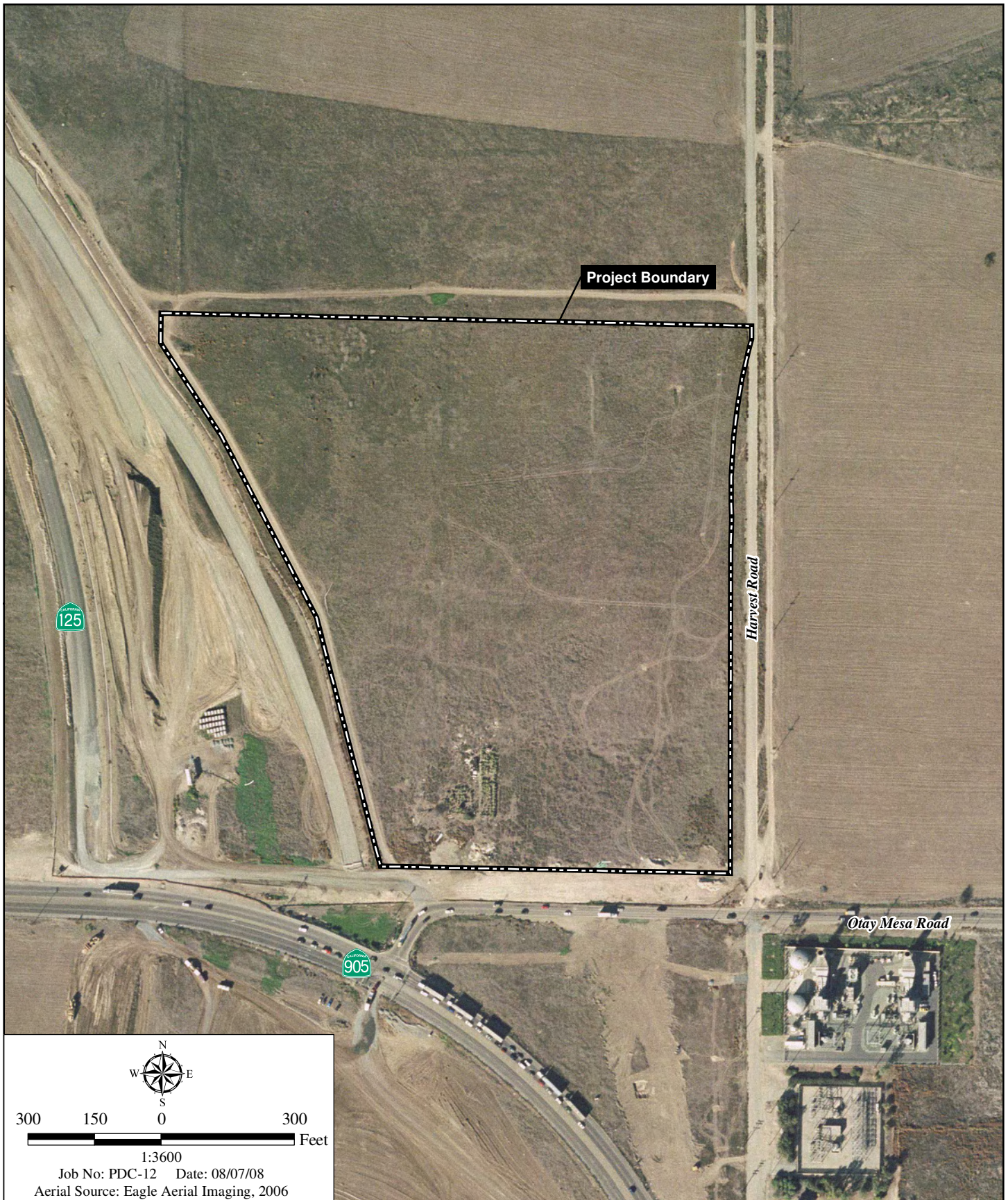
The study area is undeveloped and currently supports only non-native vegetation communities. Elevations within the study area range from approximately 528 to 574 feet above mean sea level. The study area supports 3 soil types: Diablo Clay (2 to 9 percent slopes), Diablo clay (9 to 15 percent slopes), and Salinas clay (0 to 2 percent slopes; Bowman 1973). As stated above, the study area is bounded by SR 125 to the west, Otay Mesa Road to the south, Harvest Road to the east, and undeveloped land to the north (Figure 3).

### **1.4.1 Regional Context**

The study area is within the South County Segment of the County’s MSCP Subarea Plan and is identified as a minor amendment area that is not considered essential to the MSCP preserve design and may not require on-site conservation unless specific resources (i.e., vernal pools or County Group A and B plant species) are observed. Under the Biological Mitigation Ordinance (BMO) definition, the habitat located within the study area does not qualify as a Biological Resource Core Area (BRCA).

### **1.4.2 Habitat Types/Vegetation Communities**

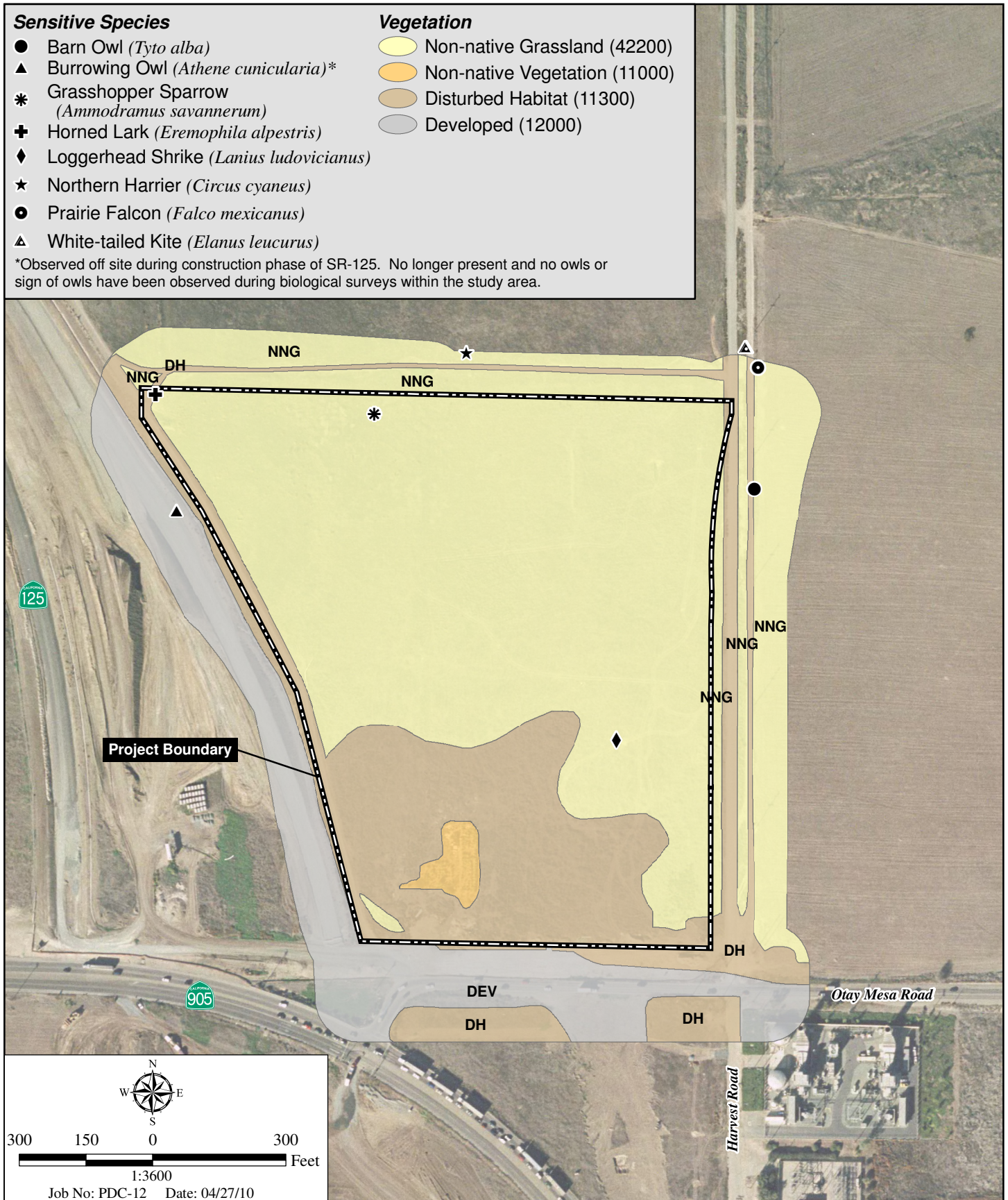
Four (4) vegetation communities were mapped within the study area: non-native grassland, disturbed habitat, non-native vegetation, and developed land (Figure 4; Table 2).



## Aerial Photograph

CALIFORNIA CROSSINGS

Figure 3



## Vegetation and Sensitive Resources

CALIFORNIA CROSSINGS

<b>Table 2</b> <b>EXISTING VEGETATION COMMUNITIES</b> <b>WITHIN STUDY AREA</b>		
<b>VEGETATION COMMUNITY*</b>	<b>TIER</b>	<b>ACREAGE (on and off site)</b>
Non-native grassland (42200)	III	22.2
Disturbed habitat (11300)	IV	9.2
Non-native vegetation (11000)	--	0.4
Developed (12000)	--	2.2
<b>TOTAL</b>		<b>34.0</b>

\*Vegetation community codes follow Holland (1986) and Oberbauer (2008)

### **Non-native Grassland**

Non-native grassland consists of exotic annual grasses often associated with weedy annual forbs. Many of the annual grasses within this community originated in Mediterranean Europe, an area with a long history of agriculture and a climate similar to that of coastal southern California. Although composed largely of weedy exotic species, non-native grassland serves as valuable raptor foraging habitat because it often supports large rodent populations and is thus considered a County sensitive habitat.

Approximately 22.2 acres of non-native grassland occur within the study area (Figure 4), which consists primarily of slender wild oat (*Avena barbata*), common ripgut grass (*Bromus diandrus*), and black mustard (*Brassica nigra*).

### **Disturbed Habitat**

Disturbed habitat includes unvegetated or sparsely vegetated areas, particularly where the soil has been heavily compacted by prior development or where agricultural lands have been abandoned. This vegetation community is generally dominated by non-native weedy species that adapt to frequent disturbance or consists of dirt trails and roads. Within the study area, disturbed habitat covers approximately 9.2 acres and consists of dirt roads and an area consisting entirely of black mustard (Figure 4).

### **Non-native Vegetation**

Non-native vegetation is typically comprised of non-native shrub and tree species (e.g., ornamentals) not immediately associated with developed areas. Non-native vegetation covers 0.4 acre of the study area (Figure 4) and consists of Mexican fan palm (*Washingtonia robusta*), canary grass (*Phalaris minor*), olive (*Olea europaea*), and Indian-fig (*Opuntia ficus-indica*).

### **Developed Land**

Developed land occurs where permanent structures or pavement has been placed, or where landscaping is clearly tended and maintained, preventing the growth of native vegetation. Approximately 2.2 acres of developed land occurs within the study area.

### **1.4.3 Flora**

A total of 56 plant species were observed during biological surveys of the study area (Appendix A). The majority of the study area is dominated by non-native weedy vegetation, including ripgut grass, slender wild oat, and black mustard.

### **1.4.4 Fauna**

A total of 50 animal species were observed/detected during biological surveys of the study area, including 11 butterfly, 3 reptile, 32 bird, and 4 mammal species (Appendix B).

### **1.4.5 Sensitive Plant Species**

No sensitive plant species were observed within the study area during surveys. Although listed plants are not expected to occur within the study area, the potential for 33 rare or sensitive plant species to occur is discussed in Appendix C.

### **1.4.6 Sensitive Animal Species**

Protocol surveys for Quino checkerspot butterfly in 2006 and 2008 were negative. No federal or state listed animal species were observed/detected within the study area. Eight (8) sensitive animal species were observed/detected within the study area, including: grasshopper sparrow (*Ammodramus savannarum*), turkey vulture (*Cathartes aura*), northern harrier (*Circus cyaneus*), white-tailed kite (*Elanus leucurus*), California horned lark (*Eremophila alpestris actia*), prairie falcon (*Falco mexicanus*), loggerhead shrike (*Lanius ludovicianus*), and common barn owl (*Tyto alba*).

In 2006, Merkel and Associates observed a burrowing owl within pipes located within the adjacent SR 125 right-of-way during construction of SR 125. Construction is complete and SR 125 is in operation. The area where the pipes and owl were observed is now developed. This species was not observed or detected by HELIX biologists during 2008 focused surveys (HELIX 2008). Based on the negative survey results from 3 separate surveys, the site is not considered to be occupied by the burrowing owl. While it is possible that owls in the vicinity could fly over the site, no sign of occupation (e.g., owls, burrows, feathers, droppings, or pellets) were observed in any of the biological surveys conducted on site since 2006.

A brief description of each animal species is provided below (listed in alphabetical order by scientific name). It should be noted that Merkel and Associates completed and submitted California Native Species Field Survey Forms to the CDFG for CNDDB-tracked animal species observed/detected during their field work on site. In addition, a list of 34 sensitive animal species with potential to occur within the study area is presented in Appendix D. A listing and explanation of status and sensitivity codes for both plant and animal species can be found in Appendix E.

#### **Grasshopper sparrow (*Ammodramus savannarum*)**

**Status:** --/SSC; County Group 1

**Distribution:** Scattered in small numbers throughout San Diego County year-round

**Habitat(s):** Grassland

**Status on site:** Observed/detected within the study area by Merkel and Associates (Figure 4)

**Turkey vulture (*Cathartes aura*)**

**Status:** --/--; County Group 1

**Distribution:** Observed throughout San Diego County with the exception of extreme coastal San Diego where development is heaviest

**Habitat(s):** Foraging habitat includes most open habitats with breeding occurring in crevices among boulders

**Status on site:** Observed flying overhead by Merkel and Associates (not mapped)

**Northern harrier (*Circus cyaneus*)**

**Status:** --/SSC; County MSCP Covered; County Group 1

**Distribution:** In San Diego County, distribution primarily scattered throughout lowlands but can also be observed in foothills, mountains, and desert

**Habitat(s):** Open grassland and marsh

**Status on site:** Observed flying overhead by Merkel and Associates (Figure 4)

**White-tailed kite (*Elanus leucurus*)**

**Status:** --/Fully Protected, County Group 1

**Distribution:** Primarily occurs throughout coastal slopes of San Diego County

**Habitat(s):** Riparian woodlands and oak or sycamore groves adjacent to grassland

**Status on site:** Observed/detected within the study area by Merkel and Associates (Figure 4)

**California horned lark (*Eremophila alpestris actia*)**

**Status:** --/WL; County Group 2

**Distribution:** Observed year-round scattered throughout San Diego County

**Habitat(s):** Coastal strand, arid grasslands, and sandy desert floors

**Status on site:** Observed/detected within the study area by Merkel and Associates (Figure 4)

**Prairie falcon (*Falco mexicanus*)**

**Status:** BCC/WL; County Group 1

**Distribution:** Observed year-round in San Diego County but more commonly during winter

**Habitat(s):** Nesting occurs on cliff or bluff ledges or occasionally in old hawk or raven nests; foraging occurs in grassland or desert habitats

**Status on site:** Observed/detected within the study area by Merkel and Associates (Figure 4)

**Loggerhead shrike (*Lanius ludovicianus*)**

**Listing:** BCC/SSC; County Group 1

**Distribution:** Breeding occurs in Canada, then migrates to southern U.S. and Mexico for winter

**Habitat:** Found in open habitats, including grasslands, shrublands, and ruderal vegetation with adequate perching locations

**Status on site:** Observed/detected within the study area by Merkel and Associates (Figure 4)

**Barn owl (*Tyto alba*)**

**Status:** --/--; County Group 2

**Distribution:** Observed throughout much of San Diego County

**Habitat(s):** Woodland habitats and open areas with trees or other structures that can offer shelter

**Status on site:** Observed/detected within the study area by Merkel and Associates (Figure 4)

#### **1.4.7 Wetlands/Jurisdictional Waters**

No U.S. Army Corps of Engineers (Corps) or CDFG jurisdictional areas, or County Resource Protection Ordinance (RPO) wetlands occur within the study area.

#### **1.4.8 Habitat Connectivity and Wildlife Corridors**

Two (2) types of wildlife corridors exist: local and regional. Local corridors provide animals with access to resources such as food, water, and shelter. Animals can use these corridors (such as the hillsides and tributary drainages to the main drainage within the study area) to travel from riparian to upland habitats and back. Regional corridors allow for animal movement between large core areas of habitat that are regionally important. They include major creeks and rivers, ridges, valleys, and large swaths of undeveloped land.

As stated above, the study area is located on Otay Mesa and is bordered by SR 125, Otay Mesa Road, and undeveloped land (Figure 3). The study area does not support riparian habitat or native vegetation and only 3 mammals were observed/detected within the study area. As stated above, the study area does not qualify as a BRCA under the BMO definition. In addition, the project site is not within or adjacent to a preserve area. Given this information, the study area is not likely to provide habitat connectivity or act as local or regional wildlife corridors.

### **1.5 APPLICABLE REGULATIONS**

Biological resources are subject to regulatory review by the federal government, State of California, and County, as discussed below.

#### **1.5.1 Federal Government**

Administered by the USFWS, the federal Endangered Species Act (ESA) provides the legal framework for the listing and protection of species (and their habitats) identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered a “take” under the ESA. Section 9(a) of the ESA defines take as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” “Harm” and “harass” are further defined in federal regulations and case law to include actions that adversely impair or disrupt a listed species’ behavioral patterns.

The USFWS identifies critical habitat for threatened and endangered species. Critical habitat is defined as areas of land considered necessary for endangered or threatened species to recover. The ultimate goal is to restore healthy populations of listed species within their native habitat so they can be removed from the list of threatened or endangered species. Once an area is designated as critical habitat pursuant to the federal ESA, all federal agencies must consult with the USFWS to ensure that any action they authorize, fund, or carry out is not likely to result in destruction or adverse modification of the critical habitat. No portion of the site is designated or proposed as critical habitat.

All migratory bird species that are native to the U.S. or its territories are protected under the federal Migratory Bird Treaty Act (MBTA), as amended under the Migratory Bird Treaty Reform Act of 2004 (FR Doc. 05-5127). The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, the MBTA is now used to place restrictions on disturbance of active bird nests during the nesting season (generally February 1 to July 30). In addition, the USFWS commonly places restrictions on disturbances allowed near active raptor nests.

### **1.5.2 State of California**

Primary environmental legislation in California is found in CEQA and its implementing guidelines (State CEQA Guidelines), which require that projects with potential adverse effects (or impacts) on the environment undergo environmental review. Adverse environmental impacts are typically mitigated as a result of the environmental review process in accordance with existing laws and regulations.

The California ESA is similar to the federal ESA in that it contains a process for listing of species and regulating potential impacts to listed species. California ESA Section 2081 authorizes the CDFG to enter into a memorandum of agreement for the take of listed species for scientific, educational, or management purposes. The Native Plant Protection Act (NPPA) enacted a process by which plants are listed as rare or endangered. The NPPA regulates collection, transport, and commerce in listed plants. The California ESA follows the NPPA and covers both plants and animals designated as endangered or threatened with extinction. Plants listed as rare under the NPPA are also designated as rare under the California ESA.

### **1.5.3 County of San Diego**

The study area is within the South County Segment of the County's MSCP Subarea Plan and is designated as a minor amendment area (Figure 4). For lands designated as amendment areas, the County's take authorizations do not apply until the amendment process has been completed. Minor amendment properties contain habitat that could be partially or completely eliminated (with appropriate mitigation) without significantly affecting the overall goals of the County's MSCP Subarea Plan (County 1997a). While not considered important to the MSCP preserve design, these minor amendment areas must go through the amendment process if sensitive resources covered by the plan would be impacted. MSCP take authorizations do not apply to the study area until the project has successfully gone through the minor amendment process. In addition to County approval, the minor amendment process requires approval of the USFWS Field Office Supervisor and CDFG National Community Conservation Planning (NCCP) Program Manager.

The MSCP has been prepared to meet the requirements of the California NCCP, federal ESA, and California ESA. It is a comprehensive, long-term habitat conservation plan that addresses the needs of multiple species by identifying key areas for preservation as open space in order to link core biological areas into a regional wildlife preserve. The County's MSCP Subarea Plan (County 1997a) implements the MSCP within the unincorporated areas under County jurisdiction.

The BMO is the mechanism by which the County implements the County MSCP Subarea Plan at the project level within the unincorporated area to attain the goals set forth in the County MSCP Subarea Plan. The BMO contains design criteria and mitigation standards that, when applied to projects requiring discretionary permits, protect habitats and species and ensures that a project does not preclude the viability of the MSCP Preserve System. In this way, the BMO promotes the preservation of lands that contribute to contiguous habitat core areas or linkages. As stated above, under the BMO definition, the habitat located within the study area does not qualify as a BRCA.

CEQA and its implementing guidelines (CEQA Guidelines) require projects that potentially have significant effects (or impacts) on the environment to be submitted for environmental review. Significant impacts to the environment are typically mitigated through the environmental review process, in accordance with existing laws and regulations. The County (lead agency under CEQA) certified the Final Environmental Impact Report (FEIR) for the EOMSP on February 17, 1994.

## **2.0 PROJECT EFFECTS**

Direct impacts are immediate impacts resulting from permanent habitat removal. Direct impacts were quantified by overlaying the limits of all project grading, blasting, and extraction on the biological resources map of the site. Indirect impacts are all actions that are not direct removal of habitat, but affect the surrounding biological resources either as a secondary effect of the direct impacts or as the cause of degradation of a biological resource over time. Projects can have a wide variety of indirect impacts depending on the nature of the project such as edge effects, animal behavioral changes, and errant construction. Cumulative impacts are those caused by numerous projects in the region and their additive effect of multiple direct and indirect impacts to biological resources over time.

### **2.1 SPECIAL STATUS PLANT SPECIES**

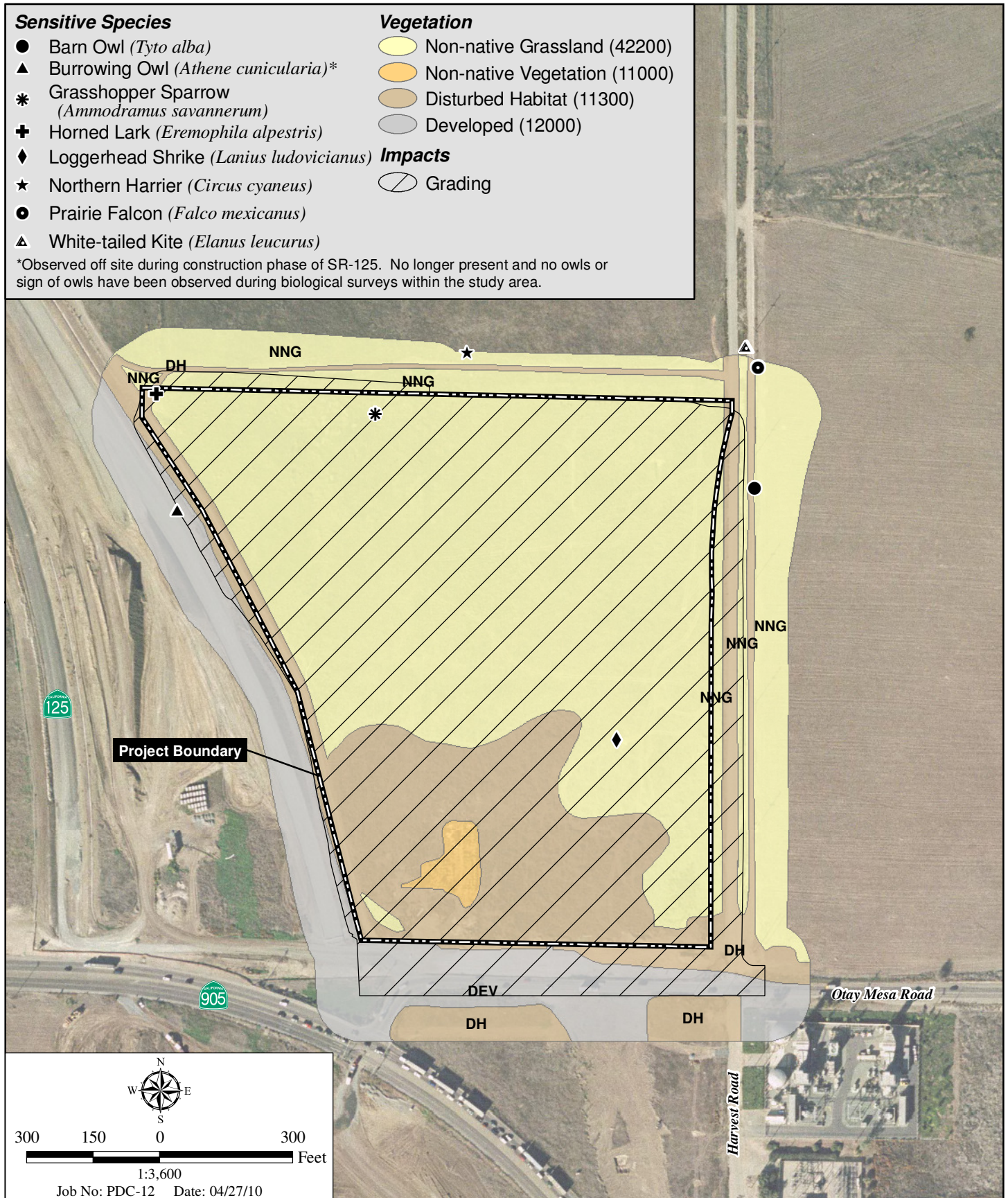
No sensitive plant species were observed within the study area. As such, no impacts to sensitive plant species are anticipated.

### **2.2 SPECIAL STATUS ANIMAL SPECIES**

Impacts to the habitat of the 8 sensitive animal species (grasshopper sparrow, turkey vulture, northern harrier, white-tailed kite, California horned lark, prairie falcon, loggerhead shrike, and common barn owl) that were observed/detected within the study area would occur (Figure 4).

### **2.3 RIPARIAN HABITAT OR SENSITIVE NATURAL COMMUNITY**

Implementation of the proposed project would result in direct impacts to 22.2 acres of non-native grassland, 0.4 acre of non-native vegetation, 9.2 acres of disturbed habitat, and 2.2 acres of developed land (Figure 5; Table 3).





<b>Table 3</b> <b>HABITAT/VEGETATION COMMUNITIES IMPACTS</b> <b>WITHIN STUDY AREA</b>		
<b>HABITAT/VEGETATION COMMUNITY*</b>	<b>TIER</b>	<b>IMPACTS</b>
Non-native grassland (42200)	III	22.2
Disturbed habitat (11300)	IV	9.2
Non-native vegetation (11000)	--	0.4
Developed (12000)	--	2.2
<b>TOTAL</b>		<b>34.0</b>

\*Vegetation community codes follow Holland (1986) and Oberbauer (2008)

## 2.4 JURISDICTIONAL WETLANDS AND WATERWAYS

No federal or state jurisdictional areas or County RPO wetlands were observed within the study area. As such, no impacts to jurisdictional areas would occur.

## 2.5 WILDLIFE MOVEMENT AND NURSERY SITES

No wildlife corridors or nursery sites occur within the study area. As such, no impacts to wildlife corridors or nursery sites would occur.

## 3.0 SPECIAL STATUS SPECIES

### 3.1 GUIDELINES FOR DETERMINING SIGNIFICANCE

*Would the project have a substantial adverse effect either directly or through habitat modifications on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations or by the USFWS or CDFG?*

Any of the following conditions would be considered significant if:

- A. The project would impact 1 or more individuals of a species listed as federally or state endangered or threatened.
- B. The project would impact the regional long-term survival of a County Group A or B plant, County Group 1 animal, or a California Species of Special Concern.
- C. The project would impact the regional long-term survival of a County Group C or D plant species or a County Group 2 animal species.
- D. The project may impact arroyo toad aestivation or breeding habitat.

- E. The project would impact golden eagle habitat.
- F. The project would result in a loss of functional foraging habitat for raptors.
- G. The project would increase noise and/or nighttime lighting to a level above ambient proven to adversely affect sensitive species.
- H. The project would impact the viability of a core wildlife area, defined as a large block of habitat (typically 500 acres or more not limited to project boundaries, though smaller areas with particularly valuable resources may also be considered a core wildlife area) that supports a viable population of a sensitive wildlife species or an area that supports multiple wildlife species.
- I. The project would increase human access or predation or competition from domestic animals, pests, or exotic species to levels that would adversely affect sensitive species.
- J. The project would impact nesting success of sensitive animals (as listed in the Guidelines for Determining Significance) through grading, clearing, fire fuel modification, and/or noise-generating activities such as construction.

### **3.2 ANALYSIS OF PROJECT EFFECTS**

The proposed project would result in significant impacts under the above guidelines for the following reasons:

3.1.F Raptor species regularly use non-native grassland habitats for foraging as well as other open habitats. White-tailed kite, northern harrier, and other raptor species were observed within the study area and/or flying overhead. Implementation of the proposed project would result in a loss of 22.2 acres of functional foraging habitat (non-native grassland) for raptors. This impact would be significant under County Guideline 3.1.F.

#### **3.1.G and 3.1.J**

Noise from such sources as clearing and grading could result in an impact to wildlife. Noise-related impacts would be considered significant if sensitive species (such as coastal California gnatcatchers or raptors) were displaced from their nests and failed to breed. Birds nesting within any area impacted by noise exceeding 60 dB or ambient could be significantly impacted. Traffic on Otay Mesa Road already generates a substantial amount of noise around the study area. Additional noise generated by the proposed project is unlikely to have a significant effect on sensitive species.

Although unlikely due to the rapidly urbanizing nature of the general project area, there is potential for ground nesting raptors (i.e., northern harrier) to nest within the study area. If tree-nesting raptors are present within 500 feet of the impact area or if ground-nesting raptors are present within 800 feet of the impact area, effects resulting from construction noise would be significant according to County Guidelines 3.1.G and 3.1.J.

The proposed project would not result in significant impacts under the above guidelines for the following reasons:

- 3.1.A No federal or state listed species were observed or detected within the study area. Therefore, none is anticipated to be affected upon implementation of the proposed project. Under County Guideline 3.1.A, no significant impact would occur.
- 3.1.B No County Group A or B plant or State (plant) Species of Special Concern would be impacted by the project as none were observed within the study area. Six (6) County Group 1 and/or State (animal) Species of Special Concern (grasshopper sparrow, turkey vulture northern harrier, white-tailed kite, prairie falcon, loggerhead shrike) were observed/detected within the study area. Although impacts to potential habitat (non-native grassland) for these species would occur, this impact would not affect the regional long-term survival of these 6 animal species. Under County Guideline 3.1.B, no significant impact would occur.
- 3.1.C No County Group C or D plant would be impacted by the proposed project as none were observed within the study area. Two (2) County Group 2 animal species (California horned lark and barn owl) were observed/detected within the study area. Although impacts to potential habitat (non-native grassland) for these species would occur, this impact would not affect the regional long-term survival of these 2 animal species. Under County Guideline 3.1.C, no significant impact would occur.
- 3.1.D The study area does not support arroyo toad aestivation or breeding habitat. As such, under County Guideline 3.1.D, no significant impact would occur.
- 3.1.E No golden eagles were observed or detected within the study area during surveys. The closest recorded golden eagle location is approximately 11 miles east of the study area in the San Ysidro Mountains. As such, under County Guideline 3.1.E, no significant impact would occur.
- 3.1.G and 3.1.J  
It should be noted that a small patch of disturbed Diegan coastal sage scrub occurs approximately 450 feet to the northeast of the site. Given the highly disturbed nature of the sage scrub, the likelihood of coastal California gnatcatchers nesting in this area is minimal. In addition, a ridge top occurs a minimum of 50 feet south of the disturbed Diegan coastal sage scrub obscuring the line of sight from the project site. Therefore, no noise impacts to coastal California gnatcatchers are anticipated. As such, under County Guidelines 3.1.F and J, no significant impact would occur to coastal California gnatcatchers.
- 3.1.H The study area is not part of a BRCA. As such, under County Guideline 3.1.H, no significant impact would occur.

- 3.1.I No sensitive plant species were observed within the study area. Eight (8) sensitive animal species (all avian) were observed/detected within the study area. No on-site preservation is proposed. SR 125 occurs to the west and both Otay Mesa Road and SR 905 occur to the south of the study area. Undeveloped land, not preserved as open space and consisting primarily of non-native grassland, occurs to the north and east of the study area. Implementation of the proposed project would not increase human access to open space or predation from domestic animals, pests, or exotic species to levels that would adversely affect sensitive species. As such, under County Guideline 3.1.I, no significant impact would occur.

### 3.3 CUMULATIVE IMPACT ANALYSIS

Although individual environmental effects of a project may be determined to be insignificant when analyzed separately, the additive effect when viewed in connection with impacts of past, present, and future projects may cause the significant loss or degradation of a resource.

The cumulative impact analysis for the proposed project includes a study area within Otay Mesa in the County and City of San Diego (City; Figure 6). This cumulative impact study area is used to assess potential cumulative impacts to special status species, riparian habitat or sensitive natural communities, jurisdictional wetlands and waterways, wildlife movements and nursery sites, and local policies. The cumulative impact study area was defined by considering land use; City, County, and country boundaries; and species' ranges and their natural history, habitats, site conditions, and topography. The cumulative impact study area is bounded to the south by the U.S./Mexico border, to the west by Interstate 805, to the north by the Otay River, and to the east by the San Ysidro Mountains.

A total of 66 projects (including the proposed project) were reviewed for this cumulative analysis (Figure 6; Table 4). Of these 66 cumulative projects, 23 would result in significant or potentially significant cumulative impacts to non-native grassland. The remaining 43 projects either would not result in impacts to sensitive biological resources or information on impacts is not available.

In accordance with the EOMSP FEIR (County 1994), impacts to non-native grassland (which is one of the predominant vegetation communities mapped on Otay Mesa) constitute a significant cumulative impact due to loss of raptor foraging habitat. The proposed project and the 23 cumulative projects with available data, however, would preserve a total of 894.89 acres of sensitive vegetation communities.

- 1 Otay Tech Center
- 2 Saeed TM/Airway Business Center
- 3 Dillard and Judd Roll County LLC/Enrico Fermi Industrial Park
- 4 Otay Hills Construction Aggregate Extraction Operation
- 5 Otay Mesa Travel Plaza
- 6 Burke Minor Subdivision/Otay Logistics Center
- 7 Pilot Travel Center
- 8 East Otay Mesa Auto Storage/  
Aaron Construction Auto Auction Park
- 9 Otay Mesa Auto Transfer/Rowland
- 10 Road/One Copart Salvage Auto Auctions
- 11 Salvage Yards Major Use, Permit Modification
- 12 Otay Mesa Generating Project

- 13** Otay Business Park
- 14** Paseo De La Fuente
- 15** Border Patrol Site Grading Plan
- 16** Power Plant Laydown Site
- 17** Vulcan Batching Plant
- 18** Corrections Corporation of America
- 19** Maple Leaf Industrial/Piper Otay Park
- 20** Otay Crossings Commerce Park
- 21** California Crossings (subject of EIR)
- 22** International Industrial Park
- 23** RTX (Rapid Transfer Express)
- 24** OMC Properties

25 Pressure-reducing Station  
26 #860 4 MG Reservoir  
27 Alta Road Pipe Placement  
28 Roll Reservoir Pipeline

**29** SR-905

**30** SR-125

### 31 SR-11 and Otay Mesa East Port of Entry

<b>32</b>	U.S. Cargo Import Facility
<b>33</b>	Reconfiguration and Expansion of the Existing San Ysidro POE

### 34 Otay Valley Regional Park

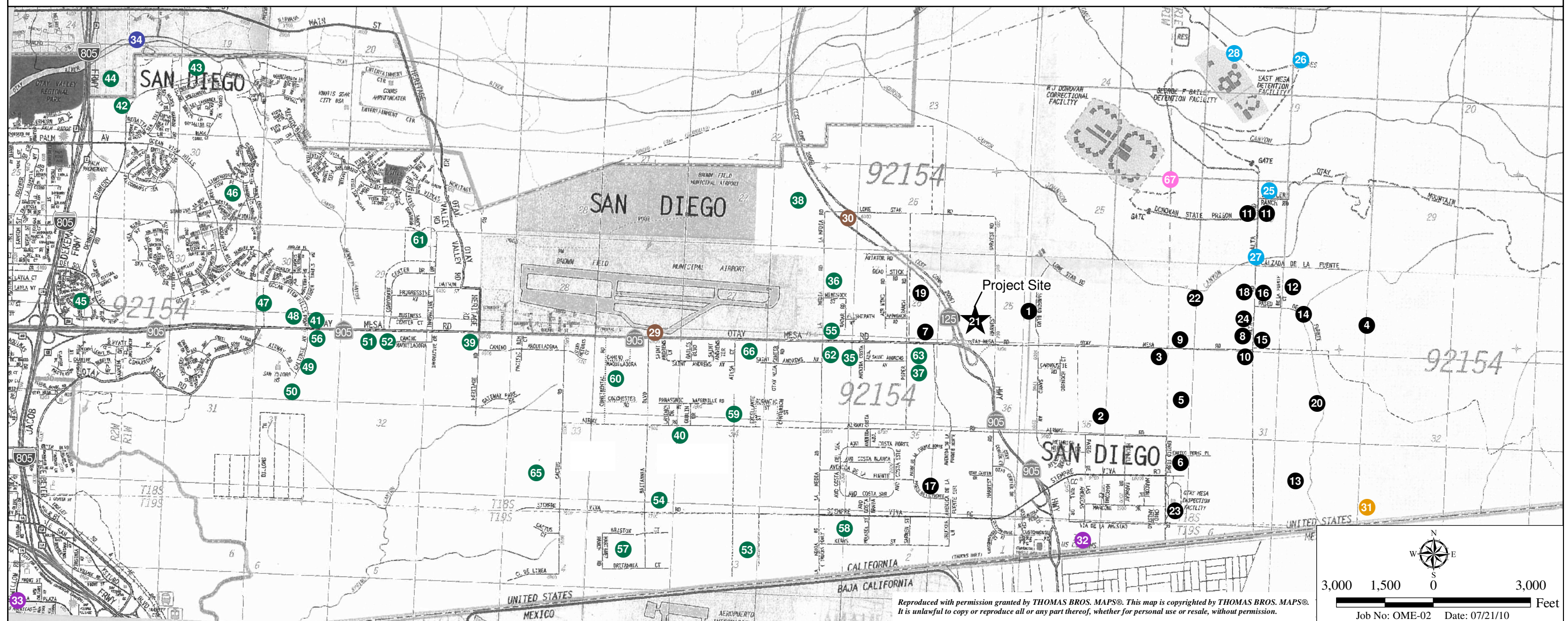
35 Sunroad/Interstate Industrial Center  
36 Sunroad Otay Park  
37 Street/La Media Truck Park III  
38 Lonestar/New Millennium  
39 Semitrailer Storage Facility  
40 Airway 18 Truck Terminal/Airway Auto Park Storage  
41 California Terraces Planning Areas 13/14 Phase I

- 42 Dennerly Ranch: Village 2/3
- 43 Dennerly Ranch: Las Casitas
- 44 Dennerly Ranch: Nakano
- 45 Rivera Del Sol: Neighborhood Park
- 46 Hidden Trails: Neighborhood Park
- 47 Ocean View Hills: Planning Area 6
- 48 St. Jerome Catholic Church
- 49 Southview
- 50 Candlelight Villas
- 51 Handler Otay Mesa Phase I
- 52 Otay Corporate Center South
- 53 Las Californias Center
- 54 Just Rite
- 55 World Petrol III

- 56 Pardee Commercial
  - 57 Martinez Ranch Business Park
  - 58 Siempre Viva Business Park
  - 59 Southwestern Community College
  - 60 Brown Field Tech Park/Otay Mesa Business Park
  - 61 Ingalls Property
  - 62 Esplande
  - 63 Interstate Industrial Center
  - 64 Otay Mesa Community Plan Update (Applies to entire City of San Diego Otay Mesa Community Plan area)
  - 65 Britannia 40
  - 66 Otay Mesa 17
- CPR**<sup>3</sup>
- 67 California Health Care Facility (for R.J. Donovan Correctional Facility)

1 Indicates Lead Agency    2 Indicates Combined Lead Agency and Project Proponent    3 Indicates Project Proponent    Caltrans = California Department of Transportation    CPR = California Prison Health Care Receivership Corporation    CV = Chula Vista    OWD = Otay Water District    SD = San Diego    USCBP = U.S. Customs and Border Protection    USGSA = U.S. General Services Administration

Note: Color of dot corresponds with the Lead Agency/Project Proponent



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## CALIFORNIA CROSSINGS

Figure 6



Table 4 CUMULATIVE PROJECTS				
MAP REFERENCE	PROJECT NAME	PROJECT NUMBER	NON-NATIVE GRASSLAND	
			Impacts	Mitigation
County of San Diego				
1	Otay Tech Center (formerly Sunroad Centrum Tech Center)	TM 5538, ER 07-19-007, SPA 07-003 (Previously TM 5139, MUP 98-020, STP 02-05139-1)	186.5	93.3
2	Saeed TM/Airway Business Center	TM 5304	38.5	19.3
3	Dillard and Judd Roll County LLC/ Enrico Fermi Industrial Park	TM 5394	NA	NA
4	Otay Hills Construction Aggregate Extraction Operation	MUP04-004, RP04-001, ER04-19-004	41.8	30.9
5	Otay Mesa Travel Plaza	TPM 20414, MUP 98-024, MUP Modification, 98-024-01	73.5	39.5
6	Burke Minor Subdivision/Otay Logistics Center	TPM 20701RPL1, ZAP 99-029, STP 05-018	40.0	20.0
7	Pilot Travel Center	TPM 20894, STP 05-021	12.9	6.5
8	East Otay Mesa Auto Storage/ Aaron Construction Auto Auction Park	MUP 00-012, Minor Deviation 00-012-02	33.4	16.7
9	Otay Mesa Auto Transfer/Rowland	MUP 03-001	8.0	4.0
10	Road/One COPART Salvage Auto Auctions	MUP 88-020, STP 00-070	NA	NA
11	Salvage Yards Major Use Permit Modification	MUP 98-001 RPL1	NA	NA
12	Otay Mesa Generating Project (Calpine)	TPM 20570	45.2	31.8
13	Otay Business Park (Paragon)	TM 5505	176.1	176.1
14	Paseo De La Fuente	CG 4530	11.96	5.98
15	Border Patrol Site Grading Plan (East Otay Mesa Parcel B Grading Plan)	L 14456	17.7	8.86
16	Power Plant Laydown Site	L 14208	13.5	6.75
17	Vulcan Batching Plant	L 14625	10.9	5.45
18	Corrections Corporation of America	SPA06-005, MUP06-074	37.0	25.2
19	Maple Leaf Industrial/Piper Otay Park	TM 5527	23.4	11.7
20	Otay Crossings Commerce Park	TM 5405, SPA 04-006, MUP 00-024	290.4	273.2
21	California Crossings	TPM 21046, MUP06-102, 93-19-006AA	23.4	12.75
22	International Industrial Park	TM 5549	NA	NA
23	RTX (Rapid Transfer Express)	S08-022	14.63	15.0
24	OMC Properties	TPM 21140	NA	NA

Table 4 (cont.)

## CUMULATIVE PROJECTS

MAP REFERENCE	PROJECT NAME	PROJECT NUMBER	NON-NATIVE GRASSLAND	
			Impacts	Mitigation
Otay Water District Capital Improvement Projects				
25	Pressure-reducing station	NA	NA	NA
26	#860-1 4 MG Reservoir	NA	NA	NA
27	Alta Road Pipe Placement	NA	NA	NA
82	Roll Reservoir Pipeline	NA	NA	NA
Caltrans				
29	SR-905	NA	NA	NA
30	SR-125	NA	NA	NA
Caltrans and GSA				
31	SR-11 And Otay Mesa East Port Of Entry	PM 0.0/2.7, EA056300	NA	NA
GSA/CBP Capital Improvement Projects				
32	U.S. Cargo Import Facility	NA	NA	NA
33	Reconfiguration And Expansion Of The Existing San Ysidro POE	NA	NA	NA
City of San Diego, County of San Diego and City of Chula Vista				
34	Otay Valley Regional Park	NA	NA	NA
City of San Diego				
35	Sunroad/Interstate Industrial Center	TPM 98-0759	NA	NA
36	Sunroad Otay Park	TM 91-0394	NA	NA
37	Street/La Media Truck Park III	77518	NA	NA
38	Lone Star/New Millennium	50728	112.7	56.4
39	Semitrailer Storage Facility	Planned DP 12083	NA	NA
40	Airway 18 Truck Terminal/ Airway Auto Park Storage	2246	NA	NA
41	California Terraces Planning Areas 13 & 14 Phase I	4987	NA	NA
42	Dennery Ranch Village 2/3	5091	NA	NA
43	Dennery Ranch: Las Casitas	NA	NA	NA
44	Dennery Ranch: Nakano	NA	NA	NA
45	Rivera del Sol: Neighborhood Park	NA	NA	NA
46	Hidden Trails: Neighborhood Park	6738	NA	NA
47	Ocean View Hills: Planning Area 6	TM 86-1032	NA	NA
48	St. Jerome's Catholic Church	NA	NA	NA
49	Southview	2204	NA	NA

Table 4 (cont.) CUMULATIVE PROJECTS				
MAP REFERENCE	PROJECT NAME	PROJECT NUMBER	NON-NATIVE GRASSLAND	
			Impacts	Mitigation
City of San Diego (cont.)				
50	Candlelight Villas	50591/40329	NA	NA
51	Handler Otay Mesa Phase 1	92122	31.8	15.9
52	Otay Corporate Center South	98825	NA	NA
53	Las Californias Center	4281	NA	NA
54	Just Rite	5751	NA	NA
55	World Petrol III	32284/97452	NA	NA
56	Pardee Commercial	NA	NA	NA
57	Martinez Ranch Business Park	100994/45445	NA	NA
58	Siempre Viva Business Park	102899	NA	NA
59	Southwestern Community College	95483	NA	NA
60	Brown Field Tech Park	88422/88430NA	NA	NA
61	Ingalls Property	NA	NA	NA
62	Esplande	NA	NA	NA
63	Interstate Industrial Center	NA	NA	NA
64	OMCP update	30330	NA	NA
65	Britannia 40	147108	39.2	19.6
66	Otay Mesa 17	125423	0.0	0.0
California Prison Health Care Receivership Corporation (CPR)				
67	California Health Care Facility, San Diego	SCH 2008061086	NA	NA
TOTAL			1,260.29	894.89

### 3.4 MITIGATION MEASURES AND DESIGN CONSIDERATIONS

The following mitigation measures are recommended to reduce impacts to special status species to less than significant.

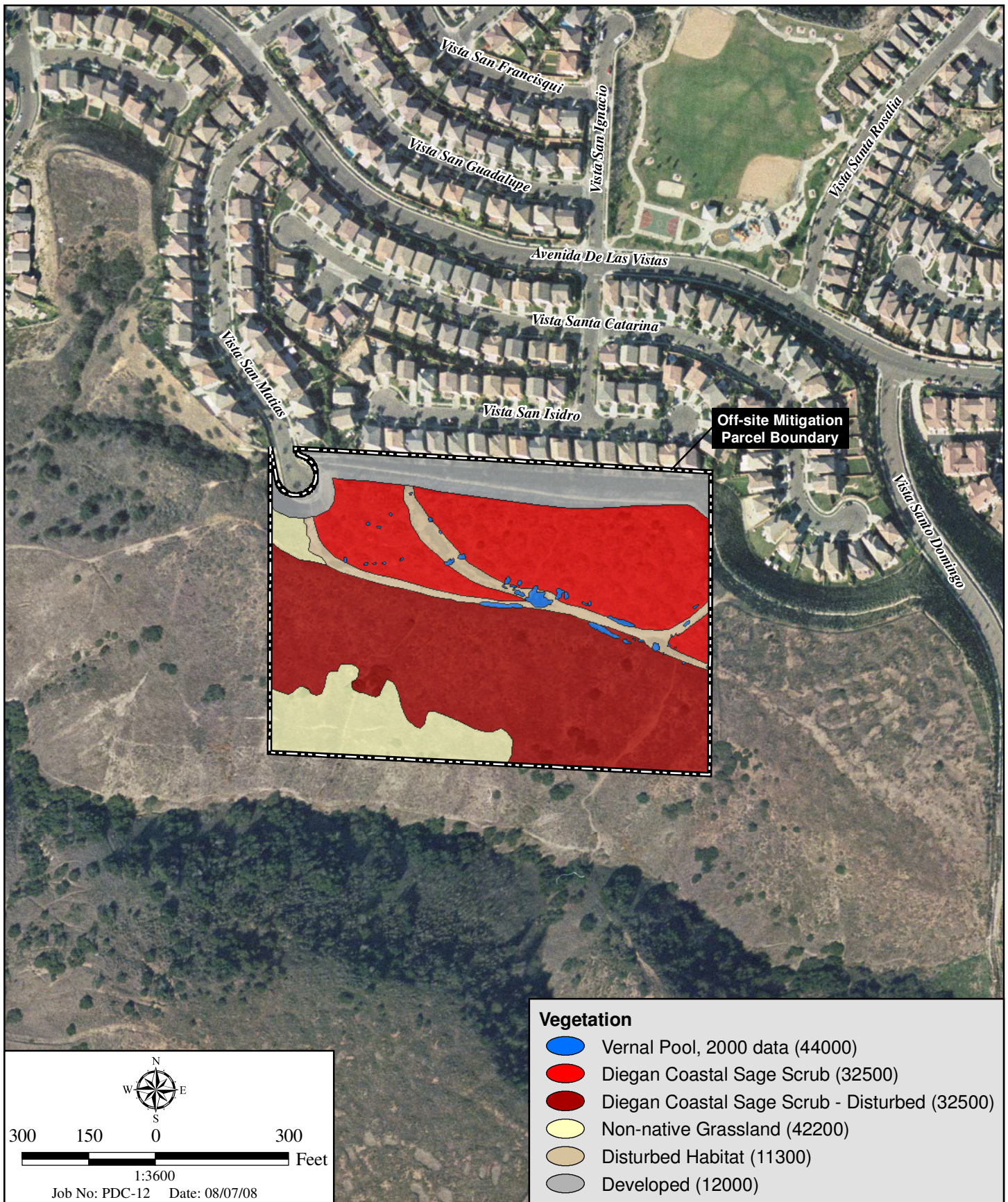
*Impact 3.4.1* Implementation of the proposed project would result in a loss of raptor foraging habitat by impacting 22.2 acres of non-native grassland.

*MM 3.4.1* The project proponent proposes to mitigate for impacts to raptor foraging habitat by purchasing the 15.4-acre Attisha Trust parcel (Figure 7) consisting of 0.15 acre of vernal pool habitat, 10.8 acres of open Diegan coastal sage scrub (including disturbed), 1.8 acres of non-native grassland, 0.8 acre of disturbed habitat, and 1.9 acres of developed land in the City of San Diego. The southern portion of the Attisha Trust parcel is a south-facing slope that supports Diegan coastal sage scrub and non-native grassland habitat while the northern portion of the mitigation site is a flat mesa with extant mima mound topography that supports Diegan coastal sage scrub, non-native grassland, vernal pool, and disturbed habitat (dirt roads). These habitats are known to serve as both nesting and foraging habitat for burrowing owls and foraging habitat for other raptors. The Attisha Trust parcel has been accepted by the resource agencies given its proximity to Dennery Canyon, the Otay Mesa preserve system, and adjacent vernal pool habitat.

The proposed project would be “up-tiering,” and providing higher quality habitat as mitigation than that which would be impacted. The Attisha Trust parcel supports a greater diversity of plant species, would provide 5 artificial burrow sites with two nesting chambers with separate openings for burrowing owl, supports vernal pool habitat (with San Diego fairy shrimp) adjacent to existing vernal pools preserves, and supports Quino checkerspot butterfly habitat. Therefore, the functions and values of the mitigation site are much higher than that of the proposed project site.

A conservation easement shall be placed over the Attisha Trust parcel and a one-time endowment shall be provided by the project applicant to be used for perpetual management of the Attisha Trust parcel. The County Department of Parks and Recreation has agreed to accept the Attisha Trust parcel in fee title along with the endowment to manage the parcel in perpetuity following installation of fencing and burrows (per. comm. Boaz 2008).

*Impact 3.4.2* Implementation of the proposed project could increase noise to a level above what is proven to affect sensitive species adversely, including but not limited to nesting raptors.



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## Attisha Trust Mitigation Parcel

CALIFORNIA CROSSINGS

Figure 7



**MM 3.4.2** Mitigation for potential noise-related impacts shall occur by allowing no grading or clearing within 500 feet of occupied tree-nesting raptor habitat during the raptor breeding season (January 15 through July 15 or until all nesting is complete), or 800 feet within ground-nesting raptor habitat during the raptor breeding season (February 1 through July 15 or until all nesting is complete). If clearing or grading is planned to begin during the raptor breeding season, a pre-construction survey shall be conducted to determine if breeding or nesting raptors species occur within impact areas. If there are no raptors nesting (includes nest building or other breeding/nesting behavior) within this area, clearing or grading shall be allowed to proceed. However, if any of these birds are observed nesting or displaying breeding/nesting behavior within the area, clearing or grading shall be postponed until all nesting (or breeding/nesting behavior) has ceased.

### **3.5 CONCLUSION**

Implementation of the proposed project could result in significant impacts to raptors. If implemented, the recommended mitigation measures would reduce these project-related impacts to below a level of significance.

## **4.0 RIPARIAN HABITAT OR SENSITIVE NATURAL COMMUNITY**

### **4.1 GUIDELINES FOR DETERMINING SIGNIFICANCE**

*Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the USFWS or CDFG?*

Any of the following conditions would be considered significant if:

- A. Project-related construction, grading, clearing, construction or other activities would temporarily or permanently remove sensitive native or naturalized habitat (as listed in Table 5 of the County Biological Guidelines, excluding those without a mitigation ratio) on or off the project site.
- B. Any of the following will occur to or within jurisdictional wetlands and/or riparian habitats as defined by the Corps, CDFG, and County: vegetation removal; grading; obstruction or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; road crossing construction; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity, and abundance.
- C. The project would draw down the groundwater table to the detriment of groundwater-dependent habitat, typically a drop of 3 feet or more from historical low groundwater levels.
- D. The project would increase human access or competition from domestic animals, pests, or exotic species to levels proven to adversely affect sensitive habitats.

- E. The project does not include a wetland buffer adequate to protect the functions and values of existing wetlands.

## **4.2 ANALYSIS OF PROJECT EFFECTS**

The proposed project would result in significant impacts under the above guidelines for the following reason:

- 4.1.A As previously stated in Section 2.0, the proposed project would directly impact 22.2 acres of non-native grassland (Figure 5). Impacts to this vegetation community would be considered significant under County Guideline 4.1.A.

The proposed project would not result in significant impacts under the above guidelines for the following reasons:

- 4.1.B No jurisdictional wetlands and/or riparian habitats as defined by the Corps, CDFG, or County occur within the study area. As such, under County Guideline 4.1.B, no significant impact would occur.
- 4.1.C The project study area does not support groundwater-dependent habitat and the proposed project would not draw down the groundwater table. As such, under County Guideline 4.1.C, no significant impact would occur.
- 4.1.D The project would not increase human access or competition from domestic animals, pests or exotic species to levels proven to adversely affect sensitive habitats. The only sensitive habitat within the study area is non-native grassland, which would be impacted upon project implementation. As such, under County Guideline 4.1.D, no significant impact would occur.
- 4.1.E No jurisdictional areas occur within the study area. As such, no wetland buffer is warranted. Under County Guideline 4.1.E, no significant impact would occur.

## **4.3 CUMULATIVE IMPACT ANALYSIS**

As previously stated in Section 3.3, the cumulative impact analysis for the proposed project includes 72 projects (Figure 6; Table 4), used to assess potential cumulative impacts to special status species, riparian habitat or sensitive natural communities, jurisdictional wetlands and waterways, wildlife movements and nursery sites, and local policies.

The grassland communities of the Otay Mesa region are considered biologically sensitive due to the sensitive plants and animals that they may support, coupled with increasing development pressure in the area. As discussed in Section 3.3, impacts to non-native grassland constitute a significant cumulative impact due to loss of raptor foraging habitat. The proposed project and the 22 cumulative projects with available data, however, would preserve a total of 879.89 acres of sensitive vegetation communities.

## 4.4 MITIGATION MEASURES AND DESIGN CONSIDERATIONS

*Impact 4.4.1* Implementation of the proposed project would result in direct impacts to 22.2 acres of non-native grassland (Figure 5; Table 3).

MM 4.4.1 Impacts to non-native grassland would be mitigated at a greater than 0.5:1 ratio with acquisition of the 15.4-acre Attisha Trust parcel (Figure 7) consisting of 0.15 acre of vernal pool habitat, 10.8 acres of Diegan coastal sage scrub (including disturbed), 1.8 acres of non-native grassland, 0.8 acre of disturbed habitat, and 1.9 acres of developed land in the City of San Diego. A conservation easement shall be placed over the Attisha Trust parcel and a one-time endowment shall be provided by the project applicant to be used for perpetual management of the Attisha Trust parcel. The County Department of Parks and Recreation has agreed to accept the Attisha Trust parcel in fee title along with the endowment to manage the parcel in perpetuity following installation of fencing and burrows (per. comm. Boaz 2008).

## 4.5 CONCLUSION

Implementation of the proposed project could result in significant direct impacts to non-native grassland. If implemented, the recommended mitigation measure would reduce this impact to below a level of significance. Preservation of the Attisha Trust parcel would also reduce the cumulative impact associated with the proposed project to below a level of significance by preserving habitat to offset the direct impact.

## 5.0 JURISDICTIONAL WETLANDS AND WATERWAYS

### 5.1 GUIDELINES FOR DETERMINING SIGNIFICANCE

*Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

### 5.2 ANALYSIS OF PROJECT EFFECTS

The proposed project would not result in significant impacts to federal (Corps) jurisdiction areas as none occurs within the study area.

### 5.3 CUMULATIVE IMPACT ANALYSIS

No cumulative impacts to Corps jurisdictional areas would occur as a result of the proposed project, as none occurs within the study area.

## 5.4 MITIGATION MEASURES AND DESIGN CONSIDERATIONS

No mitigation measures are required as no impacts to Corps jurisdictional areas would occur.

## 5.5 CONCLUSION

Implementation of the proposed project would not result in significant impacts to Corps jurisdictional areas as none occurs within the study area.

## 6.0 WILDLIFE MOVEMENT AND NURSERY SITES

### 6.1 GUIDELINES FOR DETERMINING SIGNIFICANCE

*Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

Any of the following conditions would be considered significant if:

- A. The project would prevent wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction.
- B. The project would substantially interfere with connectivity between blocks of habitat, or would potentially block or substantially interfere with a local or regional wildlife corridor or linkage.
- C. The project would create artificial wildlife corridors that do not follow natural movement patterns.
- D. The project would increase noise and/or nighttime lighting in a wildlife corridor or linkage to levels proven to affect the behavior of the animals identified in a site-specific analysis of wildlife movement.
- E. The project does not maintain an adequate width for an existing wildlife corridor or linkage and/or would further constrain an already narrow corridor through activities such as (but not limited to) reduction of corridor width, removal of available vegetative cover, placement of incompatible uses adjacent to it, and placement of barriers in the movement path.
- F. The project does not maintain adequate visual continuity (i.e., long lines-of-site) within wildlife corridors or linkages.

### 6.2 ANALYSIS OF PROJECT EFFECTS

The proposed project would not result in significant impacts under the above guidelines for the following reasons:

#### 6.1.A through 6.1.F

The study area does not function as a local or regional wildlife corridor or linkage. No nursery sites occur within the study area and it is not located within a BRCA. Under County Guidelines 6.1.A through 6.1.F, no significant impact would occur.

### **6.3 CUMULATIVE IMPACT ANALYSIS**

As stated above, the 23 cumulative projects with available data would preserve a total of 894.89 acres of sensitive habitat. As such, no cumulatively significant impact to wildlife corridors or nursery sites would occur.

### **6.4 MITIGATION MEASURES AND DESIGN CONSIDERATIONS**

Implementation of MM 4.4.1 would mitigate for impacts from noise on sensitive animal species.

### **6.5 CONCLUSION**

Implementation of the proposed project would result in impacts to raptor foraging habitat. If implemented, the recommended mitigation measure would reduce this impact to below a level of significance. Preservation of the Attisha Trust parcel would also reduce the cumulative impact associated with the proposed project to below a level of significance by preserving habitat to offset the direct impact.

## **7.0 LOCAL POLICIES, ORDINANCES, ADOPTED PLANS**

### **7.1 GUIDELINES FOR DETERMINING SIGNIFICANCE**

*Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? Would the project conflict with the provisions of an adopted Habitat Conservation Plan (HCP), NCCP plan, or other approved local, regional, or state habitat conservation plan?*

Any of the following conditions would be considered significant if:

- A. For lands outside of the MSCP, the project would impact Diegan coastal sage scrub vegetation in excess of the County's 5 percent habitat loss threshold as defined by the Southern California Coastal Sage Scrub NCCP Guidelines.
- B. The project would preclude or prevent the preparation of the subregional NCCP. For example, the project proposes development within areas that have been identified by the County or resource agencies as critical to future habitat preserves.
- C. The project will impact any amount of sensitive habitat lands as outlined in the RPO.
- D. The project would not minimize and/or mitigate coastal sage scrub habitat loss in accordance with Section 4.3 of the NCCP Guidelines.
- E. The project does not conform to goals and requirements outlined in any applicable HCP, Resource Management Plan (RMP), Special Area Management Plan (SAMP), Watershed Plan, or similar regional planning effort.

- F. For lands within the MSCP, the project would not minimize impacts to the BRCA as defined in the BMO.
- G. The project would preclude connectivity between areas of high habitat values, as defined by the Southern California Coastal Sage Scrub NCCP Guidelines.
- H. The project does not maintain existing movement corridors and/or habitat linkages as defined by the BMO.
- I. The project does not avoid impacts to MSCP narrow endemic species and would impact core populations of narrow endemics.
- J. The project would reduce the likelihood of survival and recovery of listed species in the wild.
- K. The project would result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (MBTA).
- L. The project would result in the take of eagles, eagle eggs, or any part of an eagle (Bald and Golden Eagle Protection Act [BGEPA]).

## **7.2 ANALYSIS OF PROJECT EFFECTS**

The proposed project would not result in significant impacts under the above guidelines for the following reasons:

- 7.1.A The project is within the MSCP Subarea Plan and does not support Diegan coastal sage scrub habitat; therefore, County Guideline 7.1.A is not applicable.
- 7.1.B Implementation of the proposed project would not preclude or prevent the preparation of the subregional NCCP as the study area occurs within an approved MSCP. The study area would not impact land within the County's Proposed Hardline Preserve identified in the County's MSCP Subarea Plan. As such, there would be no impact to the overall MSCP preserve. Under County Guideline 7.1.B, no significant impact would occur.
- 7.1.C No sensitive habitat lands as outlined in the RPO occur within the project site; therefore, County Guideline 7.1.C is not applicable.
- 7.1.D The study area does not support Diegan coastal sage scrub or any potential coastal California gnatcatcher habitat. Therefore, County Guideline 7.1.D is not applicable.
- 7.1.E The project is within a minor amendment area of the County's MSCP Subarea Plan and would conform to the goals and requirements of this regional planning effort through the minor amendment process. No other regional planning effort (such the Otay River SAMP or Otay River Water Management Plan) includes the study area. Under County Guideline 7.1.E, no significant impact would occur.

- 7.1.F The study area is not part of a BRCA as defined in the BMO. Therefore, County Guideline 7.1.F is not applicable.
- 7.1.G Implementation of the proposed project would not preclude connectivity between areas of high habitat values as the project site and adjacent lands do not support areas of high habitat values as defined by the NCCP guidelines. Under County Guideline 7.1.G, no significant impact would occur.
- 7.1.H The study area does not function as a local or regional wildlife corridor or linkage. No nursery sites occur within the study area and the study area is not located within a BRCA. Under County Guideline 7.1.H, no significant impact would occur.
- 7.1.I No MSCP narrow endemic species were observed within the study area during biological surveys. As such, none would be impacted upon project implementation. Under County Guideline 7.1.I, no significant impact would occur.
- 7.1.J No listed plant or animal species were observed or detected within or adjacent to the study area during biological surveys. Under County Guideline 7.1.J, no significant impact would occur.
- 7.1.K Implementation of MM 3.4.2 would ensure compliance with the MBTA. Therefore, the proposed project would not result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs. Under County Guideline 7.1.K, no significant impact would occur.
- 7.1.L As previously discussed, no eagles were observed or detected within the study area and no eagle nests occur within 11 miles of the study area. As such, implementation of the proposed project would not result in the take of eagles, eagle eggs, or any part of an eagle, as defined by the BGEPA. Under County Guideline 7.1.L, no significant impact would occur.

### **7.3 CUMULATIVE IMPACT ANALYSIS**

Each of the cumulative projects listed in Table 4 and discussed above would be required to conform to County Guidelines 7.1.A through 7.1.L and provide mitigation as appropriate. In addition, the proposed project results in less than significant impacts for 11 of the 12 guidelines in Section 7.0. As discussed in Section 4.3, any impacts to non-native grassland communities in the Otay Mesa region are considered cumulatively significant. Mitigation is proposed to reduce the project impacts to non-native grassland to below a level of significance.

### **7.4 MITIGATION MEASURES AND DESIGN CONSIDERATIONS**

No mitigation measures are required as no impacts to local policies, ordinances, or adopted plans would occur.

## 7.5 CONCLUSION

Implementation of the proposed project would result in a significant impact to 1 sensitive vegetation community (non-native grassland) as outlined in the RPO. Preservation of the 15.4-acre Attisha Trust parcel consisting of 0.15 acre of vernal pool habitat, 10.8 acres of Diegan coastal sage scrub (including disturbed), 1.8 acres of non-native grassland, 0.8 acre of disturbed habitat, and 1.9 acres of developed land would mitigate this impact. Preservation of the Attisha Trust parcel would also reduce the cumulative impact associated with the proposed project to below a level of significance by preserving habitat to offset the direct impact.

## 8.0 SUMMARY OF PROJECT IMPACTS AND MITIGATION

Implementation of the proposed project would result in significant impacts to sensitive animal species, sensitive natural communities (non-native grassland), and local policies (impacts to sensitive habitat [non-native grassland] pursuant to the County RPO).

The proposed project would directly impact 22.2 acres of non-native grassland, a County sensitive vegetation community that provides raptor foraging habitat. This non-native grassland habitat is not occupied by the burrowing owl and therefore the project would have no direct impacts on this species. Although unlikely, indirect impacts from noise during construction activities also may result in significant impacts to raptors. In accordance with current MSCP Guidelines and County requirements, impacts to non-native grassland would be mitigated at a greater than 0.5:1 ratio.

Mitigation measures for habitat loss include acquisition of the 15.4-acre Attisha Trust parcel consisting of 0.15 acre of vernal pool habitat, 10.8 acres of Diegan coastal sage scrub (including disturbed), 1.8 acres of non-native grassland, 0.8 acre of disturbed habitat, and 1.9 acres of developed land. A conservation easement would be placed over the Attisha Trust parcel and a one-time endowment would be provided by the project applicant to be used for perpetual management of the Attisha Trust parcel. In addition, although no impacts to the burrowing owl are anticipated, the project applicant proposes installation of 5 artificial burrowing owl burrows on the Attisha Trust parcel to improve the habitat value for this species. Each burrow will contain 2 nesting chambers with separate entrances. As stated above, the County Department of Parks and Recreation has agreed to accept the Attisha Trust parcel in fee title along with the endowment to manage the parcel in perpetuity following installation of fencing and burrows (per. comm. Boaz 2008). If clearing or grading is planned to begin during the avian breeding season, a pre-construction survey shall be conducted to determine if breeding or nesting avian species occur within impact areas. With implementation of the mitigation measures listed in Sections 3.4, 4.4, and 6.4 for significant impacts to sensitive biological resources, all project-specific impacts would be mitigated to below a level of significance.

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## Appendix A

### PLANT SPECIES OBSERVED



**Appendix A**  
**PLANT SPECIES OBSERVED – CALIFORNIA CROSSING**

<b><u>FAMILY</u></b>	<b><u>SCIENTIFIC NAME</u></b>	<b><u>COMMON NAME</u></b>	<b><u>HABITAT†</u></b>
<b>DICOTS</b>			
Amaranthaceae	<i>Amaranthus albus</i> †‡	tumbleweed	NNG
Apiaceae	<i>Foeniculum vulgare</i> †*‡	fennel	NNG
Asteraceae	<i>Ambrosia salsola</i> †‡	cheesebrush	NNG
	<i>Baccharis salicifolia</i> ‡	mule fat	NNG
	<i>Baccharis sarothroides</i> ‡*	broom baccharis	NNG, NNV
	<i>Centaurea melitensis</i> †*‡	star thistle	NNG, NNV
	<i>Chrysanthemum coronarium</i> †*‡	garland daisy	NNG, NNV
	<i>Conyza bonariensis</i> †‡	flax-leaf fleabane	NNG
	<i>Deinandra fasciculata</i> ‡	fascicled tarplant	NNG
	<i>Lactuca serriola</i> †‡	prickly lettuce	NNG
	<i>Picris echioides</i> †*‡	bristly ox-tongue	NNG
	<i>Silybum marianum</i> †*‡	milk thistle	NNG
	<i>Sonchus oleraceus</i> †*‡	common sow thistle	NNG
Boraginaceae	<i>Amsinckia menziesii</i> ‡	rancher's fiddleneck	NNG
Brassicaceae	<i>Brassica nigra</i> †*‡	black mustard	NNG, NNV
	<i>Brassica rapa</i> †*	field mustard	NNG
	<i>Hirschfeldia incana</i> †*‡	perennial mustard	NNG
	<i>Sisymbrium irio</i> †*‡	London rocket	NNG, NNV
Cactaceae	<i>Opuntia ficus-indica</i> †*‡	Indian-fig	NNV
Chenopodiaceae	<i>Chenopodium album</i> †‡*	Lamb's quarters	NNG, NNV
	<i>Chenopodium murale</i> †‡	nettle-leaf goosefoot	NNG, NNV
	<i>Atriplex semibaccata</i> †*	Australian saltbush	NNG
	<i>Chenopodium</i> sp.† *	pigweed	NNG
	<i>Salsola tragus</i> †*‡	Russian thistle	NNG, NNV
	<i>Beta vulgaris</i> †*	sea beet	NNG
Convolvulaceae	<i>Convolvulus arvensis</i> †*‡	bindweed	NNG
Fabaceae	<i>Medicago polymorpha</i> *	bur clover	NNG
	<i>Melilotus indica</i> †*	Indian sweet clover	NNG
	<i>Vicia villosa</i> †*	winter vetch	NNG
	<i>Vicia sativa</i> †‡	common vetch	NNG
	<i>Lupinus bicolor</i> *‡	miniature lupine	NNG
	<i>Medicago polymorpha</i> †*	bur-clover	NNG
Geraniaceae	<i>Erodium cicutarium</i> †*‡	red-stem filaree	NNG
	<i>Erodium moschatum</i> †*‡	green-stem filaree	NNG
Lamiaceae	<i>Marrubium vulgare</i> †*	horehound	NNG, NNV
Malvaceae	<i>Malva parviflora</i> †*‡	cheeseweed	NNG
	<i>Malvella leprosa</i> †*	alkali-mallow	NNG
Moraceae	<i>Morus alba</i> †‡	white mulberry tree	NNV
Oleaceae	<i>Olea europaea</i> †*	olive	NNV

**Appendix A (cont.)**  
**PLANT SPECIES OBSERVED – CALIFORNIA CROSSING**

<b><u>FAMILY</u></b>	<b><u>SCIENTIFIC NAME</u></b>	<b><u>COMMON NAME</u></b>	<b><u>HABITAT†</u></b>
<b>DICOTS</b> (cont.)			
Plantaginaceae	<i>Plantago erecta</i> *	dwarf plantain	NNG
Polygonaceae	<i>Polygonum</i> sp.	knotweed	NNG
Primulaceae	<i>Anagallis arvensis</i> †*	scarlet pimpernel	NNG, NNV
Solanaceae	<i>Solanum elaeagnifolium</i> ‡	white/silverleaf horse-nettle	NNG
Urticaceae	<i>Urtica urens</i> †*‡	dwarf nettle	NNG
<b>MONOCOTS</b>			
Arecaceae	<i>Washingtonia robusta</i> †*‡	Mexican fan palm	NNG, NNV
Iridaceae	<i>Sisyrinchium bellum</i> *	blue-eyed grass	NNG
Poaceae	<i>Avena barbata</i> †*‡	slender wild oat	NNG
	<i>Avena fatua</i> †*	wild oat	NNG
	<i>Bromus diandrus</i> †*‡	common ripgut grass	NNG
	<i>Bromus madritensis</i> ssp. <i>rubens</i> †*‡	foxtail chess	NNG, NNV
	<i>Hordeum jubatum</i> †*	foxtail barley	NNG
	<i>Hordeum marinum</i> ssp. <i>gussoneanum</i> †*	Mediterranean barley	NNG
	<i>Hordeum murinum</i> †‡*	hare barley	NNG, NNV
	<i>Hordeum vulgare</i> †‡*	cultivated barley	NNG
	<i>Lamarckia aurea</i> †‡	golden-top	NNG
	<i>Lolium multiflorum</i> †*‡	Italian ryegrass	NNG
	<i>Phalaris minor</i> †*‡	canary grass	NNG, NNV

†Non-native species

\*Species observed/detected by HELIX

‡Species observed/detected by Merkel and Associates



## Appendix B

### ANIMAL SPECIES OBSERVED OR DETECTED



**Appendix B**  
**ANIMAL SPECIES OBSERVED OR DETECTED – CALIFORNIA CROSSING**

**SCIENTIFIC NAME**

**COMMON NAME**

**INVERTEBRATES**

Lepidoptera – Butterflies and Moths

<i>Anthocharis cethura</i> ‡	desert orangetip
<i>Brephidium exila</i> *	western pygmy blue
<i>Coenonympha californica</i> *	California ringlet
<i>Erynnis funeralis</i> *	funereal duskywing
<i>Junonia coenia</i> ‡	common buckeye
<i>Pieris rapae</i> *‡	cabbage white
<i>Pontia protodice</i> *	checkered white
<i>Pyrgus albescens</i> *	white (common) checkered skipper
<i>Strymon melinus</i>	gray hairstreak
<i>Vanessa annabella</i> *	west coast lady
<i>Vanessa cardui</i> *‡	painted lady

**VERTEBRATES**

**Reptiles**

Phrynosomatidae – Earless, Spiny, Tree, Side-blotched, and Horned Lizards

<i>Sceloporus occidentalis</i> *‡	western fence lizard
<i>Uta stansburiana</i> ‡	side-blotched lizard

Viperidae

<i>Crotalus oreganus</i> (aka <i>Crotalus viridis oreganus</i> )*‡	Pacific rattlesnake
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**Birds**

Accipitridae – Hawks

<i>Buteo jamaicensis</i> *‡	Red-tailed hawk
<i>Circus cyaneus</i> †*‡	northern harrier
<i>Elanus caeruleus</i> †‡	white-tailed kite

Aegithalidae

<i>Psaltiriparus minimus</i> *	bushtit
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Alaudidae – Larks

<i>Eremophila alpestris actia</i> †‡	California horned lark
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Apodidae – Swifts

<i>Aeronautes saxatalis</i> ‡	white-throated swift
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**Appendix B (cont.)**  
**ANIMAL SPECIES OBSERVED OR DETECTED – CALIFORNIA CROSSING**

<b><u>SCIENTIFIC NAME</u></b>	<b><u>COMMON NAME</u></b>
<b>VERTEBRATES (cont.)</b>	
<b><u>Birds</u> (cont.)</b>	
Cardinalidae – Grosbeaks, Buntings	
<i>Passerina caerulea</i> †	blue grosbeak
Cathartidae – Vultures	
<i>Cathartes aura</i> ††	turkey vulture
Columbidae – Doves	
<i>Columba livia</i> *	rock dove
<i>Zenaida macroura</i> *†	mourning dove
Corvidae – Crows, Ravens	
<i>Corvus brachyrhynchos</i> *	American crow
<i>Corvus corax</i> *	common raven
Emberizidae – Sparrows, Towhees	
<i>Ammodramus sandwichensis</i> *†	savannah sparrow
<i>Ammodramus savannarum</i> ††	grasshopper sparrow
<i>Melospiza melodia</i> †	song sparrow
<i>Spizella atrogularis</i> *	black-chinned sparrow
Falconidae – Falcons, Caracara	
<i>Falco mexicanus</i> ††	prairie falcon
<i>Falco sparverius</i> †*	American kestrel
Fringillidae – Finches	
<i>Carpodacus mexicanus</i> *†	house finch
Hirundinidae – Swallows	
<i>Petrochelidon pyrrhonota</i> †	cliff swallow
<i>Stelgidopteryx serripennis</i> †	northern rough-winged swallow
Icteridae – Orioles	
<i>Agelaius phoeniceus</i> *†	red-winged blackbird
<i>Sturnella neglecta</i> *†	western meadowlark
Laniidae – Shrikes	
<i>Lanius ludovicianus</i> ††	loggerhead shrike
Mimidae – Mimic Thrushes	
<i>Mimus polyglottos</i> *†	northern mockingbird
Sturnidae – Starlings	
<i>Sturnus vulgaris</i> †	European starling
Sylviidae – Old World Warblers and Gnatcatchers	
<i>Poliophtila caerulea</i> †	blue-gray gnatcatcher
Trochilidae – Hummingbirds	
<i>Calypte anna</i> *†	Anna's hummingbird

**Appendix B (cont.)**  
**ANIMAL SPECIES OBSERVED OR DETECTED – CALIFORNIA CROSSING**

**SCIENTIFIC NAME**

**COMMON NAME**

**Birds** (cont.)

**VERTEBRATES** (cont.)

Troglodytidae – Wrens

*Thryomanes bewickii*\*

Bewick's wren

Tyrannidae – Flycatchers

*Sayornis saya*‡

Say's phoebe

*Tyrannus verticalis*\*‡

western kingbird

Tytonidae – Owls

*Tyto alba*†‡

barn owl

**Mammals**

Canidae – Coyotes, Wolves, Foxes, Dogs

*Canis familiaris*\*

feral dog, domestic dog

*Canis latrans*‡

coyote (scat)

Leporidae – Rabbits and Hares

*Sylvilagus audubonii*†\*

desert cottontail

Sciuridae – Squirrels, Chipmunks, and Marmots

*Spermophilus beecheyi* \*

California ground squirrel

†Sensitive species

\*Species observed/detected by HELIX

‡Species observed/detected by Merkel and Associates

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## Appendix C

# SENSITIVE PLANT SPECIES WITH POTENTIAL TO OCCUR



**Appendix C**  
**SENSITIVE PLANT SPECIES WITH POTENTIAL TO OCCUR – CALIFORNIA CROSSINGS**

<b>Species</b>	<b>Sensitivity Codes and Status*</b>	<b>Habitat Preference/ Requirements</b>	<b>Verified on Site</b>	<b>Potential to Occur on Site</b>	<b>Factual Basis for Determination of Occurrence Potential</b>
San Diego thorn-mint ( <i>Acanthomintha ilicifolia</i> )	FT/SE CNPS List 1B.1 MSCP Narrow Endemic (NE) MSCP Covered County Group A	Ranges from San Diego County to Baja California, Mexico (Baja). Prefers heavy clay soils near vernal pools, in grasslands, and in chaparral and coastal sage scrub.	No	None	Vernal pools do not occur within the study area.
Shaw's agave ( <i>Agave shawii</i> )	--/-- CNPS List 2.1 MSCP NE MSCP Covered County Group B	Found in San Diego County and Baja. Occurs in coastal sage scrub and maritime succulent scrub, often on volcanic soils.	No	None	Appropriate habitat does not occur within the study area. This is a fairly conspicuous species that would have been observed if present.
San Diego ambrosia ( <i>Ambrosia pumila</i> )	FE/-- CNPS List 1B.1 MSCP NE MSCP Covered County Group A	Ranges from coastal San Diego County, western Riverside County, and Baja. Occurs along riparian scrub, or open riparian forest.	No	None	Appropriate habitat does not occur within the study area.
Golden-spined cereus ( <i>Bergerocactus emoryi</i> )	--/-- CNPS List 2.1 County Group B	Found on San Clemente and Santa Catalina islands and in southern San Diego County. Maritime succulent scrub is primary habitat of this coastal cactus. Moist ocean breezes may be key to habitat requirements. In Baja, this is sometimes a dominant shrub of ocean-facing slopes overlooking the coastal strand. <i>Euphorbia misera</i> and <i>Agave shawii</i> may be plant associates.	No	None	Appropriate habitat does not occur within the study area. Would have been observed if present.
Orcutt's brodiaea ( <i>Brodiaea orcuttii</i> )	--/-- CNPS List 1B.1 MSCP Covered County Group A	Found in Riverside, San Bernardino, Orange, and San Diego counties and Baja. Vernal moist grasslands, mima-mound topography, and the periphery of vernal pools are all preferred habitat for this corm.	No	None	Vernal pools do not occur within the study area.

**Appendix C (cont.)**  
**SENSITIVE PLANT SPECIES WITH POTENTIAL TO OCCUR – CALIFORNIA CROSSINGS**

<b>Species</b>	<b>Sensitivity Codes and Status*</b>	<b>Habitat Preference/ Requirements</b>	<b>Verified on Site</b>	<b>Potential to Occur on Site</b>	<b>Factual Basis for Determination of Occurrence Potential</b>
Dunn's mariposa lily ( <i>Calochortus dunnii</i> )	--/SR CNPS List 1B.2 MSCP NE MSCP Covered County Group A	Found in San Diego County and Baja. Rocky openings in chaparral or grassland/chaparral ecotone are preferred habitat of this species, which seems restricted to metavolcanic- and gabbroic-derived soils.	No	None	Appropriate habitat does not occur within the study area.
Wart-stemmed ceanothus ( <i>Ceanothus verrucosus</i> )	--/-- CNPS List 2.2 MSCP Covered County Group B	Found in San Diego County and Baja. Occurs largely in coastal chaparral communities.	No	None	Appropriate habitat does not occur within the study area. This is a fairly conspicuous species that would have been observed if present.
Summer holly ( <i>Comarostaphylos diversifolia</i> ssp. <i>diversifolia</i> )	--/-- CNPS List 1B.2 County Group A	Found in San Diego, Riverside, and Orange counties and Baja. Southern mixed chaparral (usually on mesic north-facing slopes) is preferred habitat.	No	None	Appropriate habitat does not occur within the study area. Species is a large shrub that would have been observed if present.
Orcutt's bird's-beak ( <i>Cordylanthus orcuttianus</i> )	--/-- CNPS List 2.1 MSCP Covered County Group B	Found in seasonal drainages, riparian areas, and often in adjacent upland scrub habitats.	No	None	Appropriate habitat does not occur within the study area.
Tecate cypress ( <i>Cupressus forbesii</i> )	--/-- CNPS List 1B.1 MSCP Covered County Group A	Found from southern San Diego County south to Baja. Occurs in chaparral along foothills or in canyons and valleys along drainages or on north-facing slopes.	No	None	Appropriate habitat does not occur within the study area. Would have been observed if present.
Snake cholla ( <i>Cylindropuntia californica</i> var. <i>californica</i> ; Rebman and Simpson 2006)	--/-- CNPS List 1B.1 MSCP NE MSCP Covered County Group A	Occurs in chaparral and coastal sage scrub from Point Loma south to Chula Vista and Baja.	No	None	Appropriate habitat does not occur within the study area. Would have been observed if present.
Otay tarplant ( <i>Deinandra conjugens</i> )	FT/SE CNPS List 1B.1 MSCP NE MSCP Covered County Group A	Found in San Diego County and Baja. Prefers clay slopes and mesas. Occurs in coastal sage scrub and grasslands, and adjacent to vernal pools on Otay Mesa.	No	None	Vernal pools do not occur within the study area.

**Appendix C (cont.)**  
**SENSITIVE PLANT SPECIES WITH POTENTIAL TO OCCUR – CALIFORNIA CROSSINGS**

<b>Species</b>	<b>Sensitivity Codes and Status*</b>	<b>Habitat Preference/ Requirements</b>	<b>Verified on Site</b>	<b>Potential to Occur on Site</b>	<b>Factual Basis for Determination of Occurrence Potential</b>
Western dichondra ( <i>Dichondra occidentalis</i> )	--/-- CNPS List 4.2 County Group D	Ranges from Sonoma and Marin counties (questionable) disjunct to San Barbara County south and along the coast to Baja. Found in understory of chaparral and other shaded places, along foothills and coastal areas.	No	None	Appropriate habitat does not occur within the study area.
Orcutt's dudleya ( <i>Dudleya attenuate</i> ssp. <i>orcuttii</i> )	--/-- CNPS List 2.1 County Group B	Found only in San Diego County and Baja. Occurs in coastal bluff scrub, chaparral, and sage scrub communities near the coast.	No	None	Appropriate habitat does not occur within the study area.
Variegated dudleya ( <i>Dudleya variegata</i> )	--/-- CNPS List 1B.2 MSCP NE County Group	Found in San Diego County and Baja. Occurs on dry hillsides and mesas in both foothill and coastal areas.	No	None	Appropriate habitat does not occur within the study area.
Palmer's goldenbush ( <i>Ericameria palmeri</i> ssp. <i>palmeri</i> )	--/-- CNPS List 2.2 MSCP NE MSCP Covered County Group B	Evergreen shrub found along drainages through chaparral and coastal sage scrub vegetation.	No	None	Appropriate habitat does not occur within the study area.
San Diego button-celery ( <i>Eryngium aristulatum</i> var. <i>parishii</i> )	FE/SE CNPS List 1B.1 MSCP Covered County Group A	Occurs in Riverside and San Diego counties as well as Baja. Vernal pools or mima mound areas with vernal moist conditions are species' preferred habitat.	No	None	Vernal pools do not occur within the study area.
San Diego barrel cactus ( <i>Ferocactus viridescens</i> )	--/-- CNPS List 2.1 County Group B County MSCP Covered	Ranges from San Diego County into Baja. Prefers dry slopes in coastal sage scrub.	No	None	Appropriate habitat does not occur within the study area.
Palmer's grapplinghook ( <i>Harpagonella palmeri</i> )	--/-- CNPS List 4.2 County Group B	Ranges from Arizona and New Mexico to southern California. Annual herb that occurs on clay soils in chaparral, coastal sage scrub, and grasslands.	No	Low	Little suitable habitat occurs within the study area.

**Appendix C (cont.)**  
**SENSITIVE PLANT SPECIES WITH POTENTIAL TO OCCUR – CALIFORNIA CROSSINGS**

<b>Species</b>	<b>Sensitivity Codes and Status*</b>	<b>Habitat Preference/ Requirements</b>	<b>Verified on Site</b>	<b>Potential to Occur on Site</b>	<b>Factual Basis for Determination of Occurrence Potential</b>
Graceful tarplant ( <i>Holocarpha virgata</i> ssp. <i>elongata</i> )	--/-- CNPS List 4.2 CA Endemic County Group D	Found in San Diego, Riverside, and Orange counties in grasslands and open areas.	No	Low	Little suitable habitat occurs within the study area.
Heart-leaved pitcher sage ( <i>Lepechinia cardiophylla</i> )	--/-- CNPS 1B.2 MSCP NE MSCP Covered County Group A	Found in Riverside, Orange, and San Diego counties and Baja. Generally found in cismontane woodland, coniferous forest, and dry chaparral areas.	No	None	Appropriate habitat does not occur within the study area. Known in California from only 10 sites. Not reported within approximately 24 miles of the project site.
Gander's pitcher sage ( <i>Lepechinia ganderi</i> )	--/-- CNPS List 1B.3 MSCP NE MSCP Covered County Group A	Occurs in San Diego County and Baja. Grows in low-growing but relatively dense chaparral, typically on gabbro or metavolcanic soils.	No	None	Appropriate habitat does not occur within the study area. Nearest reported sighting is on Otay Mountain several miles east of the project site.
Willow monardella ( <i>Monardella viminea</i> )	FE/SE CNPS 1B.1 CA Endemic MSCP NE MSCP Covered County Group A	Found only in San Diego County and possibly Baja. Generally found in riparian scrub with sandy soils.	No	None	Appropriate habitat does not occur within the study area.
San Diego goldenstar ( <i>Muilla clevelandii</i> )	--/-- CNPS List 1B.1 County Group A MSCP Covered	Found from southwestern San Diego County to northwestern Baja. Prefers clay soils on dry mesas and hillsides in coastal sage scrub or chaparral with mima mound topography.	No	None	Appropriate habitat does not occur within the study area.
Little mousetail ( <i>Myosurus minimus</i> ssp. <i>apus</i> )	--/-- CNPS List 3.1 County Group C	Ranges from Oregon south through San Diego County into Baja. Inconspicuous species of vernal pools and alkaline marshes.	No	None	Vernal pools do not occur within the study area.
Spreading navarretia ( <i>Navarretia fossalis</i> )	FT/-- CNPS List 1B.1 County Group A	Range from western Riverside through southwestern San Diego counties into Baja. Vernal pools and vernal swales are preferred habitat of this small annual. Population size strongly correlated with rainfall; during drought years, numbers may be drastically reduced.	No	None	Vernal pools do not occur within the study area.

**Appendix C (cont.)**  
**SENSITIVE PLANT SPECIES WITH POTENTIAL TO OCCUR – CALIFORNIA CROSSINGS**

<b>Species</b>	<b>Sensitivity Codes and Status*</b>	<b>Habitat Preference/ Requirements</b>	<b>Verified on Site</b>	<b>Potential to Occur on Site</b>	<b>Factual Basis for Determination of Occurrence Potential</b>
Dehesa bear grass ( <i>Nolina interrata</i> )	--/SE CNPS 1B.1 County Group A MSCP NE	Occurs in open chaparral habitats in San Diego County and Baja.	No	None	Appropriate habitat does not occur within the study area.
California orcutt grass ( <i>Orcuttia californica</i> )	FE/SE CNPS List 1B.1 MSCP Covered County Group A	Ranges from Riverside County south into Baja. Generally associated with vernal pools.	No	None	Vernal pools do not occur within the study area.
Short-lobed broomrape ( <i>Orobanche parishii</i> ssp. <i>brachyloba</i> )	--/-- CNPS List 4.2 County Group D	Occurs in sandy substrate in coastal bluff scrub and coastal dunes.	No	None	Appropriate habitat does not occur within the study area.
Otay Mesa mint ( <i>Pogogyne nudiuscula</i> )	FE/SE CNPS List 1B.1 MSCP Covered County Group A	This small annual is restricted to vernal pools in Otay Mesa.	No	None	Vernal pools do not occur within the study area.
Nuttall's scrub oak ( <i>Quercus dumosa</i> )	--/-- CNPS List 1B.1 County Group A	Generally found in open chaparral communities in coastal areas of San Diego, Orange, and Santa Barbara counties and Baja.	No	None	Appropriate habitat does not occur within the study area. This is a fairly conspicuous species that would have been observed if present.
Munz's sage ( <i>Salvia munzii</i> )	--/-- CNPS List 2.2 County Group B	Ranges from the San Miguel Mountains to northern Baja. Prefers sage scrub and chaparral along southern foothills and coastal areas.	No	None	Appropriate habitat does not occur within the study area.
Parry's tetraococcus ( <i>Tetraococcus dioicus</i> )	--/-- CNPS List 1B.2 MSCP Covered County Group A	Mostly found in northern San Diego County. Species is a deciduous shrub occurring in low-growing chaparral and coastal sage scrub.	No	None	Appropriate habitat does not occur within the study area.

\*Refer to Appendix E for a listing and explanation of status and sensitivity codes

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## Appendix D

# SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR



**Appendix D**  
**SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR**

Species	Sensitivity Codes and Status*	Habitat Preference/Requirements	Verified on Site	Potential to Occur on Site	Factual Basis for Determination of Occurrence Potential
<b>INVERTEBRATES</b>					
Quino checkerspot butterfly ( <i>Euphydryas editha quino</i> )	FE/-- County Group 1 MSCP Rare, Narrow Endemic (NE)	Currently, populations are known to exist only as several (probably isolated) colonies in southwestern Riverside and southern San Diego counties as well as northern Baja. The principal larval host plant of this species in San Diego is dwarf plantain. Potential Quino habitat in the region includes vegetation communities with relatively open areas that typically include patches of dwarf plantain, purple owl's clover, and nectaring plants. These habitats include open coastal sage scrub, vernal pools, lake margins (Emmel and Emmel 1973), non-native grassland, perennial grassland, disturbed habitat, disturbed wetlands, and open areas within shrub communities.	No	None	Focused surveys for species in 2006 and 2008 were negative.
San Diego fairy shrimp ( <i>Branchinecta sandiegonensis</i> )	FE/-- County MSCP NE County Group 1	Occurs in seasonally astatic pools in tectonic swales or earth slump basins and other areas of shallow standing water in patches of grassland and agriculture interspersed in coastal sage scrub and chaparral.	No	None	Appropriate habitat does not occur within study area.
<b>VERTEBRATES</b>					
<b>Amphibian</b>					
Western spadefoot ( <i>Spea hammondi</i> )	--/SSC County Group 2	Prefers floodplains, washes, and low hills. Southern California habitats include coastal sage scrub, chaparral, and grassland. Important habitat components include temporary pools (which form during winter and spring rains) for breeding and friable soils for burrowing.	No	None	Appropriate habitat (water-holding basins) does not occur within study area.

**Appendix D (cont.)**  
**SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR**

Species	Sensitivity Codes and Status*	Habitat Preference/Requirements	Verified on Site	Potential to Occur on Site	Factual Basis for Determination of Occurrence Potential
<b>VERTEBRATES (cont.)</b>					
<b>Reptiles</b>					
Belding's orange-throated whiptail ( <i>Cnemidophorus hyperythrus beldingi</i> )	--/SSC MSCP Covered County Group 2	Occurs in coastal sage scrub and chaparral, particularly washes and other sandy areas with patches of brush and rocks for cover.	No	None	Appropriate habitat does not occur within study area.
Red-diamond rattlesnake ( <i>Crotalus ruber</i> )	--/SSC County Group 2	Favors rocky outcrops in coastal sage scrub, chaparral, creosote bush scrub, and areas dominated by cactus. Also encountered along rocky canyon bottoms and on the flats adjacent to rocky, desert foothills.	No	None	Appropriate habitat does not occur within study area.
Coronado skink ( <i>Eumeces skiltonianus interparietalis</i> )	--/SSC County Group 2	Prefers coastal sage scrub, grassland, and ruderal habitats, particularly near streams.	No	Low	Grassland and ruderal areas occur within study area.
Coastal rosy boa ( <i>Lichanura trivirgata roseofusca</i> )	--/-- County Group 2	Found in dry, rocky brushlands and arid habitats, usually near intermittent streams but does not require permanent water.	No	None	Appropriate habitat does not occur within study area.
San Diego horned lizard ( <i>Phrynosoma coronatum blainvillei</i> )	--/SSC MSCP Covered County Group 2	Frequents a variety of habitats from sage scrub and chaparral to coniferous and broadleaf woodlands. Habitat requirements include open areas for sunning, bushes for cover, fine loose soil for rapid burial, and native ant species such as harvester ants ( <i>Pogonomyrmex</i> sp.).	No	None	Appropriate habitat does not occur within study area.
<b>Birds</b>					
Cooper's hawk ( <i>Accipiter cooperi</i> )	--/WL MSCP Covered County Group 1	Nests in open woodlands or riparian areas.	No	None	Appropriate habitat does not occur within study area.
Tricolored blackbird ( <i>Agelaius tricolor</i> )	BCC/SSC MSCP Rare, NE MSCP Covered County Group 1	Highly colonial species occurring mostly in coastal lowland grasslands near open water sources for foraging.	No	None	Appropriate habitat (water-holding basins) does not occur within study area.

**Appendix D (cont.)**  
**SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR**

Species	Sensitivity Codes and Status*	Habitat Preference/Requirements	Verified on Site	Potential to Occur on Site	Factual Basis for Determination of Occurrence Potential
<b>VERTEBRATES (cont.)</b>					
<b>Birds (cont.)</b>					
Southern California rufous-crowned sparrow ( <i>Aimophila ruficeps canescens</i> )	--/WL MSCP Covered County Group 1	Coastal sage scrub where it occurs on rocky hillsides and in canyons but also may be found in open sage scrub/grassy areas of successional growth (i.e., after a fire).	No	None	Appropriate habitat does not occur within study area.
Grasshopper sparrow ( <i>Ammodramus savannarum</i> )	--/SSC County Group 1	Grassland with sparse brush.	Yes	Observed	Observed/detected within the study area by Merkel and Associates (Figure 4).
Bell's sage sparrow ( <i>Amphispiza belli belli</i> )	BCC/WL County Group 1	Occurs in sunny, dry stands of coastal sage scrub and chaparral.	No	No	Appropriate habitat does not occur within study area.
Burrowing owl ( <i>Athene cunicularia</i> )	BCC/SSC (burrow sites) MSCP Rare, NE MSCP Covered County Group 1	Open areas such as grasslands, pastures, coastal dunes, desert scrub, and edges of agriculture fields.	No	No	In 2006, this species was observed by Merkel and Associates nesting within pipes in the SR 125 right of way during construction of SR 125. Construction of SR 125 is completed. This species was not observed or detected by HELIX biologists during 2008 surveys.
Turkey vulture ( <i>Cathartes aura</i> )	--/-- County Group 1	Foraging habitat includes most open habitats with breeding occurring in crevices among boulders.	Yes	Observed	Observed/detected flying overhead by Merkel and Associates (not mapped).
Coastal cactus wren ( <i>Campylorhynchus brunneicapillus couesi</i> )	BCC/SSC MSCP Rare, NE MSCP Covered County Group 1	Occurs in coastal sage scrub with large stands of cactus.	No	None	Appropriate habitat does not occur within study area.
Northern harrier ( <i>Circus cyaneus</i> )	--/SSC MSCP Covered County Group 1	Marshes and open grasslands but often seen flying over shrub-covered hillsides	Yes	Observed	Observed flying overhead by Merkel and Associates (Figure 4).
White-tailed kite ( <i>Elanus leucurus</i> )	--/Fully Protected County Group 1	Resident in coastal and interior California, Arizona, and southern Texas. Prefers open country and farmlands with scattered trees; forages over grasslands or marshes.	Yes	Observed	Observed/detected within the study area by Merkel and Associates (Figure 4).
California horned lark ( <i>Eremophila alpestris actia</i> )	--/WL County Group 2	Sandy beaches, agricultural fields, grasslands, and open areas	Yes	Observed	Observed/detected within the study area by Merkel and Associates (Figure 4).

**Appendix D (cont.)**  
**SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR**

Species	Sensitivity Codes and Status*	Habitat Preference/Requirements	Verified on Site	Potential to Occur on Site	Factual Basis for Determination of Occurrence Potential
<b>VERTEBRATES (cont.)</b>					
<b>Birds (cont.)</b>					
Prairie falcon ( <i>Falco mexicanus</i> )	BCC/WL County Group 1	Nesting occurs on cliff or bluff ledges or occasionally in old hawk or raven nests; foraging occurs in grassland or desert habitats.	Yes	Observed	Observed/detected within the study area by Merkel and Associates (Figure 4).
Loggerhead shrike ( <i>Lanius ludovicianus</i> )	BCC/SSC County Group 1	Found in open habitats including grasslands, shrublands, and ruderal vegetation with adequate perching locations.	Yes	Observed	Observed/detected within the study area by Merkel and Associates (Figure 4).
Coastal California gnatcatcher ( <i>Poliophtila californica californica</i> )	FT/SSC County Group 1 MSCP Covered	Coastal sage scrub in the coastal belt of southern California.	No	None	Appropriate habitat does not occur within study area.
Common barn owl ( <i>Tyto alba</i> )	--/-- County Group 2	Open country, forest edges and clearings, cultivated areas, and cities	Yes	Observed	Observed/detected within the study area by Merkel and Associates (Figure 4).
<b>Mammals</b>					
Pallid bat ( <i>Antrozous pallidus pacificus</i> )	--/SSC County Group 2	Roosts in caves, mines, bridges, crevices, abandoned buildings, and trees.	No	None	Appropriate habitat does not occur within study area.
Greater western mastiff bat ( <i>Eumops perotis californicus</i> )	--/SSC County Group 2	Occurs in chaparral and oak woodland with coast live oaks and arid, rocky areas. Roosts in buildings, crevices in cliffs, in trees, and in tunnels.	No	None	Appropriate habitat does not occur within study area.
San Diego black-tailed jackrabbit ( <i>Lepus californicus bennettii</i> )	--/SSC County Group 2	Occurs primarily in open habitats including open coastal sage scrub, chaparral, grasslands, croplands, and disturbed areas (if at least some shrub cover present).	No	Low	Sign of species would have been observed/detected if present.
Yuma myotis bat ( <i>Myotis yumanensis</i> )	--/SSC County Group 2	Occurs in arid areas. Roosts in buildings, mines, caves, and crevices.	No	None	Appropriate habitat does not occur within study area.
San Diego desert woodrat ( <i>Neotoma lepida intermedia</i> )	--/SSC County Group 2	Trapping necessary for detection but not warranted due to the species low sensitivity.	No	Low	Sign of species would have been observed/detected if present.

**Appendix D (cont.)**  
**SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR**

Species	Sensitivity Codes and Status*	Habitat Preference/Requirements	Verified on Site	Potential to Occur on Site	Factual Basis for Determination of Occurrence Potential
<b>VERTEBRATES (cont.)</b>					
<b>Mammals (cont.)</b>					
Southern mule deer ( <i>Odocoileus hemionus fuliginata</i> )	--/-- MSCP Covered County Group 2	Coastal sage scrub, riparian and montane forests, chaparral, grasslands, croplands, and open areas if some scrub cover present. Crepuscular activity and movements along routes with greatest amount of protective cover.	No	None	Appropriate habitat does not occur within study area.
Southern grasshopper mouse ( <i>Onychomys torridus ramona</i> )	--/SSC County Group 2	Occurs in open, arid habitats, including coastal sage scrub and chaparral, particularly in sandy soils.	No	None	Appropriate habitat does not occur within study area.
Dulzura California pocket mouse ( <i>Perognathus californicus femoralis</i> )	--/SSC County Group 2	Occurs in chaparral and coastal sage scrub, often adjacent to grassland.	No	None	Appropriate habitat does not occur within study area.
San Diego pocket mouse ( <i>Chaetodipus fallax fallax</i> )	--/SSC County Group 2	Inhabits sandy, herbaceous areas, usually in association with rocks or coarse gravel.	No	None	Appropriate habitat does not occur within study area.
Pacific pocket mouse ( <i>Perognathus longimembris pacificus</i> )	FE/SSC MSCP Rare, NE County Group 1	Found in coastal sage scrub, but more often in sandy washes.	No	None	Appropriate habitat does not occur within study area. Known currently from one location in Orange County and one on Camp Pendleton.
Townsend's big-eared bat ( <i>Plecotus townsendii pallescens</i> )	--/SSC County Group 2	Roosts in caves, mines, and buildings.	No	None	Appropriate habitat does not occur within study area.

\*Refer to Appendix E for a listing and explanation of status and sensitivity codes

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## Appendix E

# EXPLANATION OF STATUS CODES FOR PLANT AND ANIMAL SPECIES



**Appendix E**  
**EXPLANATION OF STATUS CODES FOR PLANT AND ANIMAL SPECIES**

**FEDERAL, STATE, AND LOCAL CODES**

**U.S. Fish and Wildlife Service (USFWS)**

FE	Federally listed endangered
FT	Federally listed threatened
BCC	Birds of Conservation Concern (discussed in more detail, below)

**California Department of Fish and Game (CDFG)**

SE	State listed endangered
ST	State listed threatened
SR	State listed rare
SSC	State species of special concern
Fully Protected	Fully Protected species refer to all vertebrate and invertebrate taxa of concern to the Natural Diversity Data Base regardless of legal or protection status. These species may not be taken or possessed without a permit from the Fish and Game Commission and/or CDFG.

**County of San Diego**

**Plant Sensitivity**

Group A	Plants rare, threatened or endangered in California or elsewhere
Group B	Plants rare, threatened or endangered in California but more common elsewhere
Group C	Plants that may be quite rare, but more information is needed to determine rarity status
Group D	Plants of limited distribution and are uncommon, but not presently rare or endangered

**Animal Sensitivity**

Group 1	Animals that have a very high level of sensitivity, either because they are listed as threatened or endangered or because they have very specific natural history requirements.
Group 2	Animal species that are becoming less common, but are not yet so rare that extirpation or extinction is imminent without immediate action. These species tend to be prolific within their suitable habitat types.

**Multiple Species Conservation Program (MSCP) Covered**

MSCP covered species for which the County has take authorization within MSCP area.

**Appendix E (cont.)**  
**EXPLANATION OF STATUS CODES FOR PLANT AND ANIMAL SPECIES**

**MSCP Narrow Endemic (NE) Species**

Some native species, primarily plants with restricted geographic distributions, soil affinities, and/or habitats, are referred to as a narrow endemic species. For vernal pools and identified narrow endemic species, jurisdictions will specify measures in their respective subarea plans to ensure that impacts to these resources are avoided to the maximum extent practicable.

**OTHER CODES AND ABBREVIATIONS**

**USFWS Birds of Conservation Concern (BCC)**

This report from 2002 aims to identify accurately the migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent USFWS' highest conservation priorities and draw attention to species in need of conservation action. USFWS hopes that by focusing attention on these highest priority species, the report will promote greater study and protection of the habitats and ecological communities upon which these species depend, thereby ensuring the future of healthy avian populations and communities. The report is available online at <http://migratorybirds.fws.gov/reports/bcc2002.pdf>.

**California Native Plant Society (CNPS) Codes**

**Lists**

- 1A = Presumed extinct.
- 1B = Rare, threatened, or endangered in California and elsewhere. Eligible for state listing.
- 2 = Rare, threatened, or endangered in California but more common elsewhere. Eligible for state listing.
- 3 = Distribution, endangerment, ecology, and/or taxonomic information needed. Some eligible for state listing.
- 4 = A watch list for species of limited distribution. Needs monitoring for changes in population status. Few (if any) eligible for state listing.

**List/Threat Code Extensions**

- .1 = Seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
- .2 = Fairly endangered in California (20 to 80 percent occurrences threatened)
- .3 = Not very endangered in California (less than 20 percent of occurrences threatened, or no current threats known)

A CA Endemic entry corresponds to those taxa that only occur in California.

All List 1A (presumed extinct in California) and some List 3 (need more information; a review list) plants lacking threat information receive no threat code extension. Threat Code guidelines represent only a starting point in threat level assessment. Other factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences are considered in setting the Threat Code.